AMERICAN JOURNAL OF VETERINARY RESEARCH

Index for Volume 52

No. 1-12 January-December, 1991

Published by

AMERICAN VETERINARY MEDICAL ASSOCIATION

1931 N MEACHAM RD, SCHAUMBURG, IL 60173-4360

INDEX OF AUTHORS

Abbott, DL, 723
Acre Sr, KE, 1922
Adair, HS, 333
Adams, LG, 718, 1848
Adams, T, 1826
Adamson, PJW, 426
Agnes, AG, 845
Ainsworth, AJ, 72
Akers, RM, 247
Alexander, JE, 665
Aller, DA, 92,
Allen, JW, 1065
Alston-Mills, B, 1201
Ames, TR, 337
Amling, KA, 1879
Anand, RS, 1407
Ancona, J, 1804
Anderson, DE, 784
Anderson, GA, 169
Anderson, J, 596
Anderson, M, 1492
Anderson, KL, 5
Anderson, NV, 869
Anthony, KL, 669
Appell, LH, 908
Armstrong, RB, 1024
Arp, LH, 1852
Astroff, AB, 1630
Auer, JA, 1456

Babish, JG, 1835
Badertscher II, RR, 133
Badzioch, M, 784
Baggot, JD, 426
Bailey, CS, 352
Baker, DC, 146
Baker, DG, 1117
Baker, GJ, 133, 1676
Baker, JC, 1401
Ball, D, 2071
Barr, SC, 570, 954, 2033
Barsanti, JA, 1029, 1262
Barta, O, 247
Barta, VD, 247
Bartel, DL, 764
Bartlett, PC, 1110
Bartlett, SA, 1075
Bascuas, JA, 449
Baskerville, A, 50
Bauer, MC, 337
Baxter, GM, 1121
Bayly, WM, 742, 748
Bearwood, DE, 206
Bech-Nielsen, S, 217, 1197
Beck, KA, 68
Behymer, DE, 1699
Beier, RC, 833
Belasco, DL, 2040
Bell, JA, 826
Bellhorn, RW, 1433
Bello, LJ, 1038
Bello, TR, 566
Benatti, U, 1630
Benoit, TG, 833
Benson, GJ, 662, 1606
Benthuysen, JA, 581
Beran, GW, 1761, 1766
Berardi, C, 1081, 1089,
Berg, J, 1951
Bergdall, V, 2060
Berney, CE, 1416
Berns, AJM, 1056
Bertin, AM, 40, 45
Betts, DM, 1061
Biberstein, EL, 1245
Biedebach, MC, 1407
Bigbie, RB, 1376
Bjorling, DE, 1474
Black, AL, 1407
Black, J, 97
Blackford, JT, 333
Blackwell, J, 1965
Blackwell, TE, 1147
Blagburn, BL, 471
Blakley, BR, 593
Blecha, F, 169
Bliss, EL, 111
Blue, JT, 68
Blythe, LL, 908, 912
Boero, MJ, 133
Bolin, CA, 1639
Bolin, SR, 269, 381, 1033
Bonass, WA, 1252
Boosinger, TR, 2071
Borg, RP, 1945
Bortnowski, HB, 1636
Bottoms, GD, 903, 2060
Boudreaux, MK, 1986, 1992, 2000
Bowman, DD, 64, 68, 1542
Bowman, KF, 75
Boyle, J, 1965
Bransby, DI, 2071
Braun, U, 1938
Braund, KG, 1879
Breeze, RG, 742, 748
Breider, MA, 1779
Brendemuehl, JP, 2071
Bretzlaff, KN, 1423
Bright, RM, 658
Brightman, AH, 9
Bristol, DG, 1960
Broadstone, RV, 999
Brogden, KA, 189
Brooks, DL, 1835
Broome, RL, 1835
Brown, C, 709
Brown, CC, 2033
Brown, DJ, 543
Brown, GB, 381
Brown, J, 1262, 1327, 1512
Brown, JE, 72
Brown, MP, 1438
Brown, SA, 961, 1029, 1357
Brown Jr, TT, 675
Brownie, CF, 222
Bruso, SL, 2075
Burton, JH, 858, 1208
Bush, L, 2071
Butler, DG, 1147
Butterweck, DM, 97

Cabaret, J, 1313
Calpin, JP, 1024
Campofreda, M, 101
Capeheart, J, 1423
Carlson, K, 2055
Carlton, WW, 613
Caron, JP, 1622
Carpenter, TE, 212, 970, 1345
Carroll, RC, 945
Casey, HW, 1537
Cassells, JA, 1639
Castagnaro, M, 1717
Castleman, WL, 880
Cavallini, A, 2043
Center, SA, 499
Chandler, ML, 1221
Chandler, SK, 104
Chao, EYS, 1479
Chapes, SK, 169
Chapman, PL, 1893
Charmley, E, 640
Cheney, CM, 2010
Cheung, ATW, 1523
Cheville, NF, 269, 1658
Chew, DJ, 12
Chiou, GCY, 1279
Chitko, CG, 169
Chrisp, CE, 56
Christian, LL, 164
Christianson, WT, 1649
Clark, CC, 1004
Clark, CH, 2007
Clark, JD, 1024
Clarke, RC, 1784
Clercx, C, 1097
Clinkenbeard, KD, 453
Clinton, CW, 1579
Clough, ER, 169
Clutton, RE, 774
Cockshutt, JR, 505
Coe, NE, 813
Colby, ED, 1747
Cole, JR, 1142
Constable, PD, 981, 990
Conway, BR, 1503
Conzelman, GM, 1835
Cook, CS, 781
Cook Jr, JR, 18, 24, 29
Cooley, AJ, 480
Cooper, BJ, 104
Copeland, DD, 1835
Coppock, RW, 1860
Corbett, WT, 222
Corrier, DE, 152, 833
Corstvet, RE, 1774
Coté, S, 1653
Counts, DF, 742, 748
Couto, CG, 965
Cowan, LA, 1262
Cowan, RG, 1075
Coyle, PA, 474
Coyne, MJ, 1182
Craig, AM, 908, 912, 1969
Craig, TM, 574, 951
Crawford, RP, 1848
Cremers, H, 1769
Cripps, PJ, 1104
Crisman, MV, 247
Cronrath, JD, 799
Cross, CE, 1300
Crowe, N, 1565
Crowell, WA, 1029, 1142, 1357
Culham, CA, 480
Cullor, J, 1492
Cummins, KA, 1397
Cummings, JF, 104
Curtis, CR, 1903
Curtis, MB, 898
Cutlip, RC, 189

D-Elmi, C, 1699
Daels, PF, 276, 282
Daigneault, J, 1492
Daley, MJ, 474
Dallman, MJ, 140
Daniel, GB, 1619
Dart, AJ, 1545
Daus, R, 1788
Davenport, DJ, 1948
Davenport, MP, 1579
Davis, AJ, 820
Davis, SW, 1316
Dawkins, HJS, 1644
Dawson, DJ, 197
Dawson, WW, 1341
De Flora, A, 1630
de Lisle, GW, 197
de Mattos, CA, 1794
de Mattos, CCP, 1794
del Cacho, E, 449
DeBoer, DJ, 602
DeBowes, LJ, 869
DeBowes, RM, 934
DeHaan, C, 551
DeLoach, JR, 833, 1630
DeNovo, RC, 658
deVries, HW, 1097
Dennis, VA, 570
Derksen, FJ, 999, 1401, 1416, 1461
Detilleux, JC, 1551
Detilleux, PG, 1658
Deuel, DM, 1898
Deyoe, BL, 886, 1658
Dhawedkar, RG, 1883
Di Leo, A, 2043
Diekman, MA, 1871
Diesel, DA, 1665
Dillon, AR, 1986, 1992, 2000
Dixon, E, 1427
Dodam, JR, 1672
Dodd, KT, 1441
Donaldson, L, 774
Donawick, WJ, 539
Donham, KJ, 1725
Dooley, MP, 307, 687
Doré, M, 375
Dorn, CR, 1197
Dorner, JL, 1738
Doyle, MP, 1518
Drag, MD, 1891
Drane, JW, 1570
Draper, DD, 164
Dreyfuss, DJ, 108
Drobatz, KJ, 1597
Drudge, JH, 1308
Dubey, JP, 239, 1316
Dubreil, D, 34
Duchet-Suchaux, MF, 40, 45
Dunlop, CJ, 1893
Dunsford, BR, 1743
Duran, SH, 1274
Durham, RA, 1826
Dyson, DH, 505
Dziezyc, J, 1279, 1448, 1452

Eades, SC, 1153
East, NE, 510
Eberhart, RJ, 2075
Eberhart, SW, 1622
Eddy, JB, 561
Ehrlich, HP, 1128
Eicker, SE, 898, 1484
Ekesten, B, 1875
Elissalde, MH, 152, 833
Ellis, JA, 1556
Elmore, RG, 1423
Elton, DM, 1252
Elvinger, F, 1692
Elzer, PH, 838
Elsasser, TH, 1320
Engen, RL, 675

Engle, JS, 1075
Enright, FM, 838
Erb, HN, 1336
Erhardsen, E, 1269
Erskine, R, 9
Evans, RH, 1747

Fairbrother, JM, 34
Fakier, N, 1295
Farver, TB, 2023
Fayer, R, 239, 1320
Feldman, BF, 1300
Feldman, EC, 903
Ferguson, DC, 1433
Ferrero, E, 1717
Ferris, KE, 813
Ficht, TA, 1848
Finco, DR, 1029, 1357
Fischer, JK, 523, 528
Fischer, WD, 1821
Fishback, JL, 759
Fix, AS, 1852
Flanders, JA, 422, 1336
Fleming, SA, 5
Florence, LZ, 1860
Foged, NT, 56
Foreman, JH, 1676
Foster, GS, 1214, 1842
Foster, NM, 192
Fox, JC, 1779
Fox, LK, 799
Francis, DH, 1051
Frank, DE, 381
Frank , GR, 2040
Franson, KL, 1159
Franti, CE, 510, 903, 1383, 1699
Freeman, AE, 1551
Freeman, DE, 539, 637, 2050
Freeman, LE, 922
French, RA, 1922
Frenkel, JK, 759
Frisbie, DD, 480
Friis, C, 1269
Frongillo, MK, 68
Fubini, SL, 1898
Fujinaga, T, 1979
Fulton, IC, 1461
Fulton, RW, 1779
Funk, K, 1300
Furuse, M, 1178

Gaiddon J, 781
Galati, P, 101
Gallagher, LV, 551, 665
Gallego, M, 449
Gamble, HR, 754
Gardner, MB, 1523
Gaskin, J, 2007
Gaughan, EM, 764
Gaunt, SD, 1537
Gavin, PR, 551
Gebhardt, MC, 1951
Gelberg, HB, 1860
Gelatt, KN, 2067
George, JW, 728
Gershwin, LJ, 1117
Ghoshal, NG, 1173
Gibbs, HC, 1706
Gielkens, ALJ, 1056
Gilger, BC, 1570
Gillette, D, 2050
Ginther, OJ, 298
Gionfriddo, JR, 1061
Giovannitti-Jensen, A, 140
Glisson, JR, 1507
Goble, DO, 333
Goetz, TE, 1676
Goshal, NG, 1684
Gossett, KA, 954, 1295
Gould, DH, 1164
Gradin, JL, 202, 206
Graichen, ME, 1503
Grandy, JL, 1893
Graning, LM, 662
Grauer, GF, 480
Gray, PR, 1401
Green, K, 1433
Green, ML, 1871
Greene, SA, 551, 665
Greiner, EC, 111
Gresham, MM, 1602
Grieve, RB, 2040
Griffin, PG, 289
Grohn, YT, 1898
Gronwall, RR, 1438
Gross, WB, 1288
Gruffydd-Jones, TJ, 1104
Guerra, V, 2043
Gum, GG, 2067

Haberman, J, 1128
Haensly, WE, 1743
Haggard, DL, 1712
Haghighi, SS, 352
Hair, JA, 1537
Halliburton, IW, 1252
Hamar, DW, 1164
Hamir, AN, 1128, 1908
Hammond, LS, 1274
Haney, JA, 72
Hanke, H, 1712
Hanner, TL, 1065
Hansen, R, 1225
Hansen, PJ, 1692
Hao, YL, 709
Harari, J, 665
Harbour, DA, 1104
Hardie, EM, 1821
Harel, J, 1653
Harikaran, K, 243
Harmon, BG, 1507
Harp, KJ, 810
Harrison, LR, 1142
Harvey, RB, 152, 1556
Hashimoto, H, 1816
Haskins, SC, 576, 1611
Hauptman, JG, 289
Hayashi, F, 1816
Hayunga, EG, 462
Heckert, RA, 692, 700, 845, 852
Heider, LE, 217, 1197
Held, JP, 1619
Hellyer, PW, 1672
Henderson, LM, 820
Hendricks, JC, 1597
Henk, WG, 1537
Henry, MM, 523, 528
Hepler, DI, 64, 951, 1542, 2040
Hidiroglou, M, 640
Hietala, SK, 426
Higgins, R, 1653
Hightower, D, 961
Hill, JE, 1518
Hillers, JK, 799
Hilwig, RW, 1258
Hinchcliff, KW, 651
Hinds, DM, 1545
Hinrichs, K, 678
Hinton Jr, A, 833
Hirakawa, DA, 1357
Hird, DW, 212, 1345, 1866
Hirsh, DC, 212, 738, 1345
Hobbs, BA, 669
Hodgson, DS, 1893
Hoffman, AM, 589
Hoffman, WE, 1676, 1738
Hoffsis, GF, 217, 981, 990
Hogan, JS, 184
Holcomb, CS, 2029
Holladay, SD, 222
Holland, SP, 1779
Homer, B, 2007
Hopper, JG, 687
Hopper, PE, 903
Hornbuckle, WE, 68
Horzinek, MC, 1769
Hoskins, JD, 1295
Houston, AE, 1438
Hsu, WH, 687, 1265
Hubbard, KA, 50
Huff, WE, 152, 1556
Hughes, FE, 1274
Hughes, HC, 1503
Hughes, JP, 276, 282
Hulse, DS, 1456
Hultgren, BD, 607
Hungerford, LL, 1738
Hunt, EL, 5
Hurley, SL, 1065

Ianconescu, M, 1794
Iandolo, JJ, 1258
Ihle, SL, 2060
Ilkiw, JE, 576, 581
Ireland, WP, 1731
Isenstein, RS, 462
Ishihara, K, 126
Ishii, H, 1816
Iyobe, S, 1816
Izawa, H, 397

Jackson, RM, 231, 410
Jacques, M, 34, 1653
Jain, A, 1262
Jain, NC, 630, 1883, 2023
Jang, SS, 738
Januszkiewicz, AJ, 1019, 1441
Jenkins, CC, 658
Jernigan, AD, 1626
Jevning, R, 1407
Johnson, AE, 146
Johnson, GS, 119
Johnson, HC, 480
Johnson, L, 224
Johnson, PJ, 1676
Johnson, RB, 1644
Johnson, RC, 64, 68, 1542
Johnson, RD, 352
Johnston, JK, 2050
Johnston, MR, 1132
Johnston, SD, 416, 1573
Johnstone, C, 1182
Jones, GF, 810
Jones, JB, 945
Joo, HS, 1649
Julian, D, 1545
Julian, RJ, 1527

Kabbur, MB, 2023
Kakoma, I, 1225
Kallfelz, 1336
Kaneko, M, 157
Kasten, RW, 1345
Kaswan, RL, 1433
Katzenellenbogen, J, 2055
Kaufman, R, 1794
Kawakami, M, 126
Kearney, MT, 1295
Keegan, RD, 551, 665
Keeley, FW, 328
Kelley, LC, 1518
Kelling, CL, 1237
Kemppainen, RJ, 682, 1274, 1397
Kenison, DC, 1320
Kennedy, JE, 1237
Kenney, JE, 1948
Kersting, KW, 1265
Khittoo, G, 713
Killington, RA, 1252
Kim, CJ, 1069
Kim, HS, 1649
Kimman, TG, 1788
Kindahl, H, 276, 282
King, LG, 1597
King, RR, 543
King, TC, 2067
Kinyon, JM, 1061
Kirk, JH, 1110
Kitagawa, H, 126
Kitchell, RL, 352
Klappenbach, K, 551
Klei, TR, 570, 954, 2033
Kluever, EA, 243
Kluge, JP, 269
Knabe, DA, 1743
Knight, DH, 543
Kocan, KM, 1537
Kociba, GJ, 965, 1924, 2010
Kodama, H, 397, 1178
Kollias, GV, 2007
Komkov, A, 961
Kommonen, B, 1341
Komulainen, A, 585
Koopmans, M, 1769
Kowalski, JJ, 115
Kraft, SL, 551
Kraft, W, 1831
Kramer, GC, 1611
Krook, LP, 764
Kruse, CA, 1132
Kubena, LF, 152, 1556
Kuhlman, G, 388
Kumar, S, 1774
Kuroda, H, 2046
Kurzman, ID, 1917
Kusuzaki, K, 1951
Kwochka, KW, 115

Laegreid, WW, 742, 748
Lagutchik, MS, 1441
Lamar, CH, 83
Lamb, SV, 1075, 1489
Landi, MS, 1503
Lange, AL, 2075
Lariviere, N, 713
Lassen, ED, 908, 912
Latimer, CA, 432, 436, 441,
Latimer, KS, 1142, 1507, 1804, 1810
Lawler, DF, 1747
Lawrence, WC, 1038
Lebel, JL, 1665
Leber, A, 1159
LeBlanc, PH, 999, 1401
Lechtenberg, KF, 803
Lee, DE, 1489
Leeming, MN, 1258
Lees, GE, 961
Lehmkuhl, HD, 189
Leib, MS, 1948
Leipold, HW, 934
Lentz, EL, 662
Leonard, M, 12
Letellier, A, 34
Levine, SA, 1898
Levings, RL, 820
Lewis, LD, 2060
Lewis, RM, 445
Libby, SJ, 1258
Light, GS, 1672
Lin, D-S, 64, 1542
Lin, HC, 1606
Lindsay, DS, 239, 471

Linsalata, M, 2043
Littledike, ET, 1033
Liu, IKM, 709
Llanes, D, 863
Long, GG, 1871
Longhofer, SL, 480
Longnecker, MT, 1456
Lothrop Jr, CD, 945
Luckert, PD, 1804, 1810
Luedke, AJ, 192
Lulich, JP, 1573, 1579, 1583
Lumsden, JS, 1784
Lynn, RC, 574, 1542
Lyons, ET, 1308

MacKay, RJ, 533
Maddux, JL, 1774
Madison, JB, 1128
Madsen, EB, 1269
Maheswaran, SK, 337
Majors, LJ, 1917
Malark, JA, 1292
Mallon, FM, 1503
Mandell, CP, 728
Mangini, V, 2043
Mankin, HJ, 1951
Mann, KA, 764
Manning, DD, 826
Manning, TO, 1960
ManWarren, T, 499
Marinculic, A, 754
Markel, MD, 402, 1350, 1479
Marple, DN, 1397
Marshall, AE, 494
Marta, KM, 202
Martin, DG, 1019, 1441
Martin, RA, 774
Massoudi, LM, 626
Matamoros, RA, 1075
Mather, EC, 1110
Mathes, LE, 1924, 2010
Mathis, GA, 1159
Matsuda, M, 393
Matz, ME, 1948
Maxwell, AK, 2029
Meador, VP, 886
Mehta, JR, 1879
Meinersmann, RJ, 1518
Mellenberger, RW, 1110
Menanteau, PS, 40
Mengel, JP, 692, 700
Mercer, SH, 574, 951
Meredith, DM, 1252
Merritt, AM, 533
Messa, C, 2043
Messier, S, 1497
Meyer, C, 1969
Meyer, RE, 1688
Mihalyi, JE, 426
Mikami, T, 397
Miller, DA, 1761, 1766
Miller, JM, 458, 1038
Miller, LD, 1551
Miller, PE, 1917
Miller, RH, 363, 630
Miller, T, 2060
Millichamp, NJ, 1279, 1448, 1452
Mirsalimi, SM, 1527
Misciagna, G, 2043
Misra, V, 1231
Mitchell, DH, 1132
Mitton, GR, 1731
Miyata, M, 157
Miyoshi, N, 940, 2046
Mizuno, S, 1979
Mohammed, HO, 764, 970, 1292
Molina, A, 863
Moll, HD, 88
Molyneux, RJ, 146
Monroe, WE, 1948
Monteiro-Riviere, NA, 75, 1960
Monti, KL, 1747
Moon, ML, 140, 774, 922
Moon, PF, 1611
Moore, JN, 345, 523, 528, 1153, 1565
Moore, MP, 551
Moorman, RJM, 1056
Morera, L, 863
Moriello, KA, 602, 1484
Morin, RL, 1479
Morishita, T, 1178
Morris, DD, 528, 1565
Morsy, MA, 1602
Moum, SG, 662
Muir, P, 1104
Muir III, WW, 12, 92, 651, 891, 981, 990
Mulrooney, DM, 62
Mundie, TG, 1019
Munnell, JF, 1474
Murai, T, 397
Muramatsu, T, 1178
Murphy, CJ, 903
Murrell, KD, 462, 754
Myers, GH, 1712
Myers, GW, 692, 700, 845, 852
Myers, RC, 709, 852

McAllister, MM, 1164
McAllister, PK, 880
McBride, BW, 858, 1208
McCapes, RH, 212
McCarthy, GM, 254
McDonald, TJ, 261
McDonell, WN, 505
McGrath, JP, 723
McGuire, J, 1274
McIlwraith, CW, 83, 317, 328,
McKeever, PJ, 416
McLaughlin, SA, 1570
McNeal, D, 581

Nachreiner, R, 1622
Nagae, Y, 393
Nagahata, H, 965
Nagaraja, KV, 1137, 1069
Nagaraja, TG, 803
Nagode, LA, 1583
Nagy, JA, 799
Nakanishi, Y, 397
Nappert, G, 713
Narfström, K, 1875
Natzke, RP, 1692
Nebbia, C, 1717
Neilsen, NR, 375
Nelson, LP, 1048
Nelson, RW, 903, 2060
Nelssen, JL, 169
Neth, S, 1336
Newell, WH, 1945
Newman, JA, 1137
Niagro, FD, 1804, 1810
Nielsen, P, 1269
Nietfield, JC, 1142
Nissen, S, 388
Nixon, AJ, 764, 1292
Niyo, Y, 1684
Noguchi, T, 157
Nolan, LK, 1512
Norman, BB, 1383, 1866
Norrdin, RW, 83, 317
Northrop, PJ, 880
Norton, TM, 2007
Nostrandt, AC, 494
Nosaka, D, 940
Nunamaker, DM, 97, 402, 1350, 1468
Nunnally, JC, 1507
Nuti, LC, 1423
Nyindo, M, 1225

O'Brien, PJ, 1527
O'Brien, TD, 718
Odensvik, K, 276, 282
Ogawa, K, 940, 2046
Ogilvie, GK, 2055
Ohashi, T, 940
Okumura, J, 1178
Okumura, M, 1979
Oldham, ER, 474, 2075
Oliver Jr, JE, 18, 24, 29
Oliver, MN, 1866
Olsen, JD, 146, 488
Olsen, JW, 1448
Olson, ME, 585
Olson, PN, 1221
Olson, WA, 1606
Onisk, DV, 243
Orsini, JA, 108
Osborne, CA, 718, 1573, 1579, 1583
Osburn, BI, 1794
Osorio, FA, 1799

Paape, MJ, 363, 630, 1201
Padrid, PA, 1300
Page, RL, 1688, 1821
Panangala, VS, 1602
Papassouliotis, K, 1104
Papparella, S, 101
Paridis, MR, 742, 748
Parks, AH, 1121
Parker, ML, 1573, 1583
Parker, MT, 119
Parmer, R, 1341
Parsons, JC, 2040
Parsonson, IM, 192
Partridge, JE, 1237
Patterson, JS, 289
Pattio, N, 1438
Patton, CS, 658
Patz, JD, 576
Paul, AJ, 1170, 1922
Paul, PS, 1237
Payeur, JB, 1512
Payne, JT, 774, 922
Pearson, EG, 1969
Pedersoli, WM, 494
Peiffer Jr, R, 781
Perron, PR, 1611
Pesti, D, 1804, 1810
Petersen, HD, 1556
Peterson, ME, 682, 917
Pfefferkorn, ER, 759
Phillips, M, 261
Phillips, TD, 152, 1556
Picanso, J, 1492
Pickett, JP, 1917
Pijanowski, GJ, 133
Pineda, MH, 307, 687
Plue, RE, 1922
Pluhar, GE, 202
Poffenbarger, EM, 1221
Polas, PJ, 2010
Politis, I, 858, 1208
Polzin, DJ, 718, 1573, 1583
Pomeroy, BS, 1069
Pote, LM, 72
Poulos, PW, 1438
Powers, BE, 317
Prasse, KW, 345, 1121
Pratt, HL, 945
Prescott, JF, 589, 1147
Provost, PJ, 289
Pugh Jr, GW, 261
Purdy, CW, 1214, 1842
Purinton, PT, 18, 24, 29
Purohit, RC, 1376
Putnam, MR, 2071

Quinn, PJ, 254

Randolph, JF, 499
Rapic, D, 754
Raskin, RE, 2029
Ratkowsky, DA, 799
Raun, K, 1269
Ravis, WR, 494, 1992, 2000
Rayburn, DB, 1019
Re, G, 1717
Rech, RH, 1826
Reed, SM, 873
Reeves, MJ, 1903
Reif, JS, 1903
Reil, D, 1300
Reimers, TJ, 422, 1075, 1489, 1747
Reiter, JA, 965
Remillard, RL, 561
Reusch, C, 1831
Reynolds, JD, 1860
Rhoads, ML, 462
Richards, AB, 1842
Richardson, DW, 402, 1004, 1468
Richey, M, 774
Richter, MA, 1826
Ridpath, JF, 269, 1033
Riebold, TW, 619
Riemann, HP, 1699
Rigsby, WE, 1518
Rings, DM, 1626
Ripple, GR, 1019
Ritchie, BW, 1804, 1810
Riviere, JE, 5, 75, 1960
Robb, RA, 1479
Robertson, BT, 494
Robertson-Byers, A, 1065
Robinson, NE, 289, 999, 1401, 1416, 1461
Rogers, KS, 961
Rogers, QR, 1010, 1014
Rohde, BH, 1279
Rohrbach, BW, 333, 658
Rolhall, TG, 669
Roperto, F, 101
Rose, R, 813
Rosenbusch, R, 1061
Rosenthal, RC, 1636
Rosolen, SC, 781
Ross, JN, 561
Ross, RF, 1497
Rossacco, P, 101
Rossmanith, SER, 2016
Roth, JA, 381, 388
Roth, R, 289
Rothschild, MF, 164
Rousseaux, CG, 593
Rowe, GE, 838
Rowe, JD, 510
Rowe, KE, 619, 908, 912
Roy, G, 34
Rozmiarek, H, 1285
Rump, KK, 1237
Runyon, CL, 1731
Russo, EA, 961
Rutkowski, JA, 1153

Sackman, JE, 314
Saif, LJ, 692, 700, 845, 852
Sakata, J, 157
Sakurai, N, 157
Salgar, SK, 1201
Salisbury, SK, 2060

Salman, MD, 1903
Samitz, EM, 1245, 1300
Sams, RA, 1626
Sandusky, GE, 613
Sanna, J, 1579
Sartin, EA, 1992, 2000
Sartin, JL, 682, 1397
Sasaki, Y, 126
Satterfield, W, 1630
Saunders, GK, 774
Savage, JC, 1164
Sawyer, DC, 1826
Scarfe, AD, 1423
Schaeffer, DJ, 1081, 1089, 1591
Scheidt, AB, 1871
Schertel, ER, 92, 981
Schlotthauer, JC, 1712
Schmall, LM, 981, 990
Schmerr, MJF, 189
Schmidt, SP, 2033
Schmitz, JA, 206, 1969
Schmotzer, WB, 619
Schoenberger, PS, 184
Schukken, YH, 1769
Schultz, KT, 480
Schulz, R, 1831
Schumacher, J, 88, 1274, 1376, 2071
Scott, EA, 619
Scott, JS, 1416
Seim, HB, 1221
Sertich, PL, 1412
Shaw, DH, 236, 1956
Shelby, RA, 2071
Shen, H, 1527
Shibata, K, 157
Shimizu, T, 2046
Shimoda, K, 157
Shirasawa, H, 157
Shires, PK, 774
Short Jr, EC, 1779
Shulaw, WP, 217
Siegel, JP, 1738
Simpson, RM, 1537
Sims, MH, 314
Siddon, D, 1591
Sisson, DV, 488,
Sivanandan, V, 1137
Skelley, LA, 533
Skinner, KL, 1292
Slater, M, 499
Slauson, DO, 375
Smeak, DD, 1327
Smith, AW, 202, 206
Smith, BL, 1456
Smith, BP, 596
Smith, CA, 445
Smith, DD, 759
Smith, DF, 1898
Smith, G, 1182
Smith, HJ, 754
Smith, KL, 184
Smith, MM, 626, 922
Smith, TM, 1061
Smith, WB, 1279
Snider III, TG, 1117
Snipes, KP, 212, 1345
Snyder, JR, 1545, 1611
Soffietti, MG, 1717
Solter, PF, 1738
Soma, LR, 2050
Songer, JG, 1258
Sonn, AE, 206
Spangler, E, 217, 1197
Spano, JS, 88, 1274, 1992, 2000
Spates, GE, 833
Spencer, PA, 108, 637
Spencer, TL, 1644
Spensley, MS, 1010, 1014
Spiess, BM, 1159
Sprenkel, TL, 669
Springfield, DS, 1951
Spurgeon, TL, 352
Srikumaran, S, 243
St Denis, SH, 1738
St Jean, GD, 1626
Stabenfeldt, GH, 276, 282
Staempfli, HR, 589
Stansfield, DG, 1542
Stashak, TS, 1903
Steffens, WL, 1507, 1804, 1810
Stephens, JA, 202
Stephenson, JR, 50
Stern, NJ, 1518
Steru, L, 781
Stewart, RH, 873
Stewart, VA, 2040
Stick, JA, 289, 1461
Stine, LC, 1237
Stoskoph, MK, 1285
Stott, JL, 1883
Stouffer, DK, 1871
Strain, GM, 231, 410
Strandberg, JD, 1285
Striler, EL, 1826
Stromberg, BE, 1712
Sturtz, DR, 820
Sugimoto, K, 157
Sumner, MP, 462
Sundlof, SF, 111
Sunyasootcharee, B, 940
Suter, MM, 445
Swaim, SF, 1376
Swalec, KM, 1327
Swanson, C, 891
Swenson, CL, 2010

Tabatabai, LB, 261
Talley, DD, 222
Tateyama, S, 940, 2046
Taylor, TS, 1456
Tedford, BL, 231, 410
Templeton, JW, 1848
Thaler, RC, 169
Thompson, JR, 1265
Thrall, DE, 1688
Thurmon, JC, 662, 1606
Thurmond, MC, 510, 1492
Todd, KS, 1170, 1922
Todhunter, DA, 184
Toivio-Kinnucan, M, 471, 1879
Tolliver, SC, 1308
Tonetti, M, 1630
Topkis, V, 1128
Torres, SMF, 416
Tran, TQ, 111
Tranquilli, WJ, 662, 1170, 1606
Trenkle, AH, 1684
Trotter, GW, 83, 317
Trueba, G, 1639
Tsunoda, N, 1979
Tucker, A, 1665
Tulamo, R-M, 1940
Tulleners, E, 1908
Turner, JD, 858, 1208
Turnwald, GH, 1295
Turrentine, MA, 119
Twardock, AR, 1081, 1089
Tyler, DE, 1142
Tyler, J, 1492

Uematsu, K, 157
Uhlman, R, 108
Ulrich, JT, 596
Unger, LK, 1579
Upton, ML, 453
Urban Jr, JF, 754, 1316
Utterback, W, 1699

Vachon, AM, 317, 328,
Valentine, AK, 92
Valentine, BA, 104
Valenza, F, 1717
Valliant, AE, 505
Valverde, A, 505
van Bree, H, 926
Van den Brom, WE, 1097
Van Der Maaten, MJ, 458
Van Ham L, 926
van Nieuwstadt, AP, 1044
van Oirschot, JT, 1056, 1788
Van Rijssen, B, 926
Van Vleet, JF, 1366, 1531
van Wuijckhuise-Sjouke, L, 1769
van Zaane, D, 1788
Vanhooser, S, 333
Varman, M, 1221
Varner, DD, 224, 1423
Vatthauer, RJ, 1712
Vaughn, SD, 224
Vaughn, JT, 2071
Vecchione, J, 108
Vegad, JL, 1883
Vermette, L, 713
Vicini, DS, 2055
Viel, L, 589
Villasin, JV, 1128
Vogel, RS, 1676, 1860
Vollmar, AM, 1831

Wachsstock, RS, 9
Wade, CG, 574, 951
Wagner, AE, 651
Wagner, PC, 607
Wagner, WC, 1860
Waldron, RD, 1893
Walker, LL, 912
Wallace, DH, 62, 1922
Wallig, MA, 1922
Walshaw, R, 1461
Walton, TE, 192
Ward, DA, 1433
Ward, GE, 810
Ward, P, 1231
Wards, BJ, 197
Ware, WA, 891
Watkins, JP, 934
Watrous, BJ, 607
Watson, ED, 678, 1412
Watson, JR, 1285
Webb, DM, 1366, 1531
Weiler, JE, 1527
Weinstein, MJ, 1951
Weisbrode, SE, 873
Weiss DJ, 337
Welch, RD, 934
Welles, EG, 345
Wellman, ML, 1924
Wertenberger, MA, 111
Weston, PG, 1423
Wheaton, LG, 1081, 1089
Wheeler, JG, 1799
Whetstone, CA, 458, 1038
Whipp, SC, 734
White, JV, 1357
Whiteley, LO, 337
Whitley, RD, 1570
Whitfield, JB, 1474
Whittington, M, 533
Wightman, KA, 613
Wikenheiser, MA, 1479
Wilcock, BP, 1147
Wilhelmsen, CL, 269
Wilkie, BN, 1784
Wilkie, DA, 432, 436, 441
Wilkinson, JE, 445
Willgohs, JA, 1051
Williams, JC, 1397
Williams, JD, 1848
Williams, PL, 1821
Williams, TJ, 474
Willits, NH, 1010, 1014
Wilson, CB, 1866
Wilson, DA, 133
Wilson, DJ, 1110, 1383, 1866
Wilson, MA, 1761, 1766
Wilsom, O, 1427
Wilson, R, 2007
Wilson, RC, 1274
Wilson, WD, 426
Wilt, GR, 2016
Winter, AJ, 838
Withrow, SJ, 1132
Wolff, WA, 1860
Wolfsheimer, KJ, 917
Wood, AKW, 1945
Wood, RL, 813
Woodruff, TS, 217
Wooley, RE, 1512
Wright, JC, 88, 1376, 1570
Wrigley, RH, 83
Wu, G, 2016
Wyckoff III, JH, 1779

Xiao, L, 1706

Yamada, T, 393
Yamaguchi, R, 2046
Yamashita, K, 1979
Yang, C, 1706
Yasuda, N, 2046
Yates, GF, 197
Yeager, AE, 764
Young, DR, 402, 1350
Yovich, JV, 83

Zanecosky, HG, 1412
Zertuche, JM, 533
Zetstra, T, 1044
Zguigal, H, 1173
Zhao, X, 858, 1208
Zhang, C, 1137
Zicker, SC, 1010, 1014
Zimmerman, GL, 62
Zinkl, J G, 2023
Ziprin, RL, 833
Ziv, G, 363
Zivicnjak, Y, 754
Zuerner, RL, 1639

Index of Subjects

ABDOMEN
Evaluation of sodium carboxymethylcellulose for prevention of experimentally induced abdominal adhesions in ponies, 88
ABOMASUM
Celiac trunk cannulation for obtaining abomasal lymph from cattle, 1117
ABORTION
Abortifacient property of bovine herpesvirus type 1 isolates that represent three subtypes determined by restriction endonuclease analysis of viral DNA, 458
Determination of ability of a thymidine kinase-negative deletion mutant of bovine herpesvirus-1 to cause abortion in cattle, 1038
Characterization of encephalomyocarditis virus isolated from aborted swine fetuses, 1649
ABSCESS
Hepatic ultrasonography and blood changes in cattle with experimentally induced hepatic abscesses, 803
ABSORPTION
Development of surgical techniques for preparation of in vitro-isolated perfused porcine skin flaps for percutaneous absorption studies, 75
Letter: 643
ABSORPTION, INTESTINAL
Evaluation of carbohydrate malassimilation and intestinal transit time in cats by measurement of breath hydrogen excretion, 1104
Acremonium coenophialum
Effects of the fungal endophyte *Acremonium coenophialum* in fescue on pregnant mares and foal viability, 2071
Actinobacillus pleuropneumoniae
Characterization and classification of *Actinobacillus* (*Haemophilus*) *pleuropneumoniae* plasmids, 1816
Actinobacillus spp
Actinobacillus suis-like organisms and evidence of hemolytic strains of *Actinobacillus lignieresii* in horses, 1245
ACYCLOVIR
Efficacy of acyclovir against herpesvirus infection in Quaker parakeets, 2007
ADENOVIRUSES
Identification and characterization of viral polypeptides from type-II avian adenoviruses, 1137
ADHESIONS
Evaluation of sodium carboxymethylcellulose for prevention of experimentally induced abdominal adhesions in ponies, 88
Effects of sodium hyaluronate on tendon healing and adhesion formation in horses, 764
ADJUVANTS, IMMUNOLOGIC
Comparison of antibody response by use of synthetic adjuvant system and Freund complete adjuvant in rabbits, 1503
ADRENAL GLAND, HYPERFUNCTION
Plasma free cortisol concentrations in dogs with hyperadrenocorticism, 682
Erythrocyte insulin receptors in dogs with spontaneous hyperadrenocorticism, 917
Atrial natriuretic peptide concentration in dogs with congestive heart failure, chronic renal failure, and hyperadrenocorticism, 1831
ADRENOCORTICOTROPIC HORMONE
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
AFLATOXINS
Diminution of aflatoxin toxicity to growing lambs by dietary supplementation with hydrated sodium calcium aluminosilicate, 152
Evaluation of an indirect enzyme-linked immunosorbent assay for screening antibody against aflatoxins, 222
Effects on aflatoxin M_1 residues in milk by addition of hydrated sodium calcium aluminosilicate to aflatoxin-contaminated diets of dairy cows, 1556
AGGLUTINATION TEST
Identification of *Mycoplasma gallisepticum* by use of monoclonal antibody in a rapid slide agglutination test, 1602
ALFENTANIL
Comparative study of the pharmacokinetics of alfentanil in rabbits, sheep, and dogs, 581
ALKALINE PHOSPHATASE
Effect of colostrum ingestion on gamma-glutamyltransferase and alkaline phosphatase activities in neonatal pups, 499
ALLOXAN
Effects of dietary fiber supplementation on glycemic control in dogs with alloxan-induced diabetes mellitus, 2060
ALVEOLI
Changes in phospholipids of alveolar lining material in calves after aerosol exposure to bovine herpesvirus-1 or parainfluenza-3 virus, 675
AMINO ACIDS
In vitro transport of cycloleucine by equine cecal mucosa, 539
Concentrations of amino acids in the plasma of neonatal foals with septicemia, 1010
Effect of age on the concentrations of amino acids in the plasma of healthy foals, 1014
4-AMINOPYRIDINE
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
AMIODARONE
Effects of amiodarone on myocardial performance in normal canine hearts and canine hearts with infarcts, 891
AMMONIA
Association of environmental air contaminants with disease and productivity in swine, 1725
Relationship between urine ammonium ion excretion and urine anion gap in dogs, 1956
AMNION
Effects of amnion and live yeast cell derivative on second-intention healing in horses, 1376
AMPICILLIN
Use of corticosterone and ampicillin for treatment of *Streptococcus faecalis* infection in chickens, 1288
ANAEROBIC BACTERIA
Identity of *Bacteroides* isolates and previously named *Bacteriodes* spp in clinical specimens of animal origin, 738
ANALYSIS, ANTIGENIC
Antigenic analysis of four species of the genus *Ehrlichia* by use of protein immunoblot, 1225
ANATOMY
Potential attachment area of the fourth maxillary premolar in dogs, 626
Gross and histologic study of the rostral epidural rete mirabile and the cavernous sinus in one-humped camels, 1173
Morphologic and morphometric study of the facial nerve in clinically normal adult dogs, 1879
Ancylostoma caninum
Effects of milbemycin oxime on adult *Ancylostoma caninum* and *Uncinaria stenocephala* in dogs with experimentally induced infections, 64
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum*, *Dipylidium caninum*, and *Trichuris vulpis* in dogs, 574
Effect of milbemycin oxime against *Ancylostoma caninum* in dogs with naturally acquired infection, 951
ANEMIA, HEMOLYTIC
Acute hemolytic anemia after oral administration of L-tryptophan in ponies, 742
Acute hemolytic anemia induced by oral administration of indole in ponies, 748
ANESTHESIA
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Influence of sedative and anesthetic agents on intradermal skin test reactions in dogs, 1484
ANESTHESIA, GENERAL
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289
Quantitative electroencephalography in dogs anesthetized with 2.0% end-tidal concentration of isoflurane anesthesia, 551
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576

Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
Effect of midazolam preanesthetic administration on thiamylal induction requirements in dogs, 662
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
Comparison of several combinations for anesthesia in rabbits, 669
Hemodynamic response of calves to tiletamine-zolazepam-xylazine anesthesia, 1606
Effects of a highly concentrated hypertonic saline-dextran volume expander on cardiopulmonary function in anesthetized normovolemic horses, 1611
Dynamic baroreflex sensitivity in anesthetized horses, maintained at 1.25 to 1.3 minimal alveolar concentration of halothane, 1672
Thermodilution estimation of cardiac output at high flows in anesthetized horses, 1893
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948

ANION GAP
Relationship between urine ammonium ion excretion and urine anion gap in dogs, 1956

ANOXIA
Effects of superoxide dismutase on injury induced by anoxia and reoxygenation in equine small intestine in vitro, 2050

ANTHELMINTICS
Controlled test evaluation of the benzimidazole anthelmintic VET 220-S alone or with concomitant trichlorfon treatment against naturally acquired gastrointestinal parasites in ponies, 566
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum, Dipylidium caninum,* and *Trichuris vulpis* in dogs, 574
Pathophysiologic effects of *Ostertagia ostertagi* in calves and their prevention by strategic anthelmintic treatments, 1706

ANTIGENIC DETERMINANTS
Antigen expression in cultured oral keratinocytes from dogs, 445

ANTI-INFLAMMATORY AGENTS
Acute effects of anti-inflammatory drugs on neodymium:yttrium aluminum garnet laser-induced uveitis in dogs, 1279

ANTIMICROBIAL SUSCEPTIBILITY
Characterization and comparison of antimicrobial susceptibilities and outer membrane protein and plasmid DNA profiles of *Pasteurella haemolytica* and certain other members of the genus *Pasteurella,* 2016

ANTIMICROBIALS
Antibiotic and sulfonamide agents in bob veal calf muscle, liver, and kidney, 1383
Resistance to antimicrobial agents and prevalence of R plasmids in *Pasteurella multocida* from swine, 1653

ANUS
Measurement of anal and genitoanal reflexes in cats, 29

AQUEOUS HUMOR
Kinetics of uptake and effects of topical indomethacin application on protein concentration in the aqueous humor of dogs, 1159
Effect of flurbiprofen on facility of aqueous outflow in the eyes of dogs, 1448
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452

ARTHRITIS
Risk factors associated with caprine arthritis-encephalitis virus infection in goats on California dairies, 510
Pharmacokinetics and synovial fluid concentrations of cephapirin in calves with suppurative arthritis, 1438

L-ASPARAGINASE
Preclinical evaluation of L-asparaginase and methotrexate administered at intermediate doses, 1636

ASPIRIN
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658
Effects of treatment with aspirin or aspirin/dipyridamole combination in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 1992

ATIPAMEZOLE
Antagonistic effect of atipamezole on xylazine-induced sedation, bradycardia, and ruminal atony in calves, 1265

ATROPHIC RHINITIS
Growth hormone concentrations in plasma of healthy pigs and pigs with atrophic rhinitis, 1684

ATROPINE
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948

AUTOGRAFTS
Morphologic study of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of glued periosteal autografts, 317
Correction: 636
Biochemical study of repair of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of periosteal autografts, 328

AZATHIOPRINE
Effects of gamma radiation and azathioprine on *Brucella abortus* infection in BALB/c mice, 838

BABOONS
Kinetic study of serum gentamicin concentrations in baboons after single- dose administration, 1285

BACTERIA
Bacterial and mycoplasmal flora of the healthy camelid conjunctival sac, 1061
Characterization of eugonic fermenters group EF-4 by polyacrylamide gel electrophoresis and protein immunoblot analysis, 1065
Effect of intestinal microflora on digestible energy and fiber digestion in chickens fed a high-fiber diet, 1178
Association of environmental air contaminants with disease and productivity in swine, 1725

BACTERIA, ANAEROBIC
Identity of *Bacteroides* isolates and previously named *Bacteroides* spp in clinical specimens of animal origin, 738

BACTERIAL ADHESION
Susceptibility of Chinese Meishan and European Large White pigs to enterotoxigenic *Escherichia coli* strains bearing colonization factor K88, 987P, K99, or F41, 40
Relationship between virulence and adherence of various enterotoxigenic *Escherichia coli* strains to isolated intestinal epithelial cells from Chinese Meishan and European Large White pigs, 45

Bacteroides nodosus
Diversity of pilin of serologically distinct *Bacteroides nodosus,* 202
Electron microscopic study of *Bacteroides nodosus* pili and associated structures, 206

Bacteroides spp
Identity of *Bacteroides* isolates and previously named *Bacteroides* spp in clinical specimens of animal origin, 738

BARORECEPTORS, SEE PRESSORECEPTORS

BEAVERS
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665

BEHAVIOR, FEEDING
Urine metabolite values in fed and nonfed clinically normal Beagles, 1573

BENZIMIDAZOLES
Controlled test evaluation of the benzimidazole anthelmintic VET 220-S alone or with concomitant trichlorfon treatment against naturally acquired gastrointestinal parasites in ponies, 566
Resistance of population-B equine strongyles to thiabendazole, oxfendazole, and phenothiazine (1981 to 1987), 1308

BIOLOGICAL TRANSPORT
In vitro transport of cycloleucine by equine cecal mucosa, 539

BIOMECHANICS
Mechanical and morphometric analysis of the third carpal bone of Thoroughbreds, 402

BIOMETRY
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781

BIRDS
Routes and prevalence of shedding of psittacine beak and feather disease virus, 1804
Hemagglutination by psittacine beak and feather disease virus and

use of hemagglutinatiion inhibition for detection of antibodies against the virus, 1810
Efficacy of acyclovir against herpesvirus infection in Quaker parakeets, 2007
BLOOD-AQUEOUS BARRIER
Fluorophotometric evaluation of experimental blood-aqueous barrier disruption in dogs, 1433
BLOOD FLOW
Use of pulsed-wave Doppler echocardiography to determine aortic and pulmonary velocity and flow variables in clinically normal dogs, 543
Use of nonimaging nuclear medicine techniques to assess the effect of flunixin meglumine on effective renal plasma flow and effective renal blood flow in healthy horses, 1619
BLOOD PRESSURE
Variance of indirect blood pressure measurements and prevalence of hypertension in clinically normal dogs, 561
BLOOD VOLUME
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527
BLOTTING, NORTHERN
Evidence of genome segment 5 reassortment in bluetongue virus field isolates, 1794
BLUETONGUE VIRUS
Temporal relationships of viremia, interferon activity, and antibody responses of sheep infected with several bluetongue virus strains, 192
Evidence of genome segment 5 reassortment in bluetongue virus field isolates, 1794
BONE
Effects of divergent selection for limb weakness on bone and muscle cross-sectional areas in Duroc swine, 164
Multiplanar quantitative computed tomography for bone mineral analysis in dogs, 1479
BONE MARROW
Variable suppression of feline bone marrow fibroblast colony-forming units by two isolates of feline leukemia virus, 1924
BOVINE LEUKEMIA VIRUS
Comparison of natural transmission of bovine leukemia virus in Holstein cows of two genetic lines selected for high and average milk production, 1551
BOVINE RESPIRATORY SYNCYTIAL VIRUS
Replication of parainfluenza type-3 virus and bovine respiratory syncytial virus in isolated bovine type-II alveolar epithelial cells, 880
Effects of bovine respiratory syncytial virus on airway function in neonatal calves, 1401
BOVINE VIRAL DIARRHEA
Lesions and localization of viral antigen in tissues of cattle with experimentally induced or naturally acquired mucosal disease, or with naturally acquired chronic bovine viral diarrhea, 269
BOVINE VIRAL DIARRHEA VIRUS
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381
Serologic detection and practical consequences of antigenic diversity among bovine viral diarrhea viruses in a vaccinated herd, 1033
Detection of bovine viral diarrhea virus, using degenerate oligonucleotide primers and the polymerase chain reaction, 1231
Monitoring bovine viral diarrhea virus vaccines for adventitious virus, using T1 ribonuclease viral RNA oligonucleotide fingerprinting, 1237
BRADYCARDIA
Antagonistic effect of atipamezole on xylazine-induced sedation, bradycardia, and ruminal atony in calves, 1265
Brucella abortus
Effects of gamma radiation and azathioprine on *Brucella abortus* infection in BALB/c mice, 838
Effect of milk stasis on *Brucella abortus* infection of the mammary gland in goats, 886
Effect of endocytic and metabolic inhibitors on the internalization and intracellular growth of *Brucella abortus* in Vero cells, 1658
Effect of stage of gestation on efficacy of *Brucella abortus* strain-19 vaccination in cattle, 1848
Brucella spp
Establishment of dose-response relationships in BALB/c mice, using *Brucella* cell surface protein and lipopolysaccharide, 261
Letter: 643
BUTORPHANOL
Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses, 1153
Dose response of butorphaol administered subcutaneously to increase visceral nociceptive threshold in dogs, 1829
C-REACTIVE PROTEIN
Activation of rainbow trout complement by C-reactive protein, 397
CALCIUM CHANNELS
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527
CALCIUM OXALATE
Prevalence of calcium oxalate uroliths in Miniature Schnauzers, 1579
Evaluation of urine and serum metabolites in Miniature Schnauzers with calcium oxalate urolithiasis, 1583
CALCIUM PUMP
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527
CAMELS
Bacterial and mycoplasmal flora of the healthy camelid conjunctival sac, 1061
Gross and histologic study of the rostral epidural rete mirabile and the cavernous sinus in one-humped camels, 1173
Campylobacter jejuni
Evaluation of *Campylobacter jejuni* colonization of the domestic ferret intestine as a model of proliferative colitis, 826
Comparative study of colonizing and noncolonizing *Campylobacter jejuni*, 1518
Campylobacter spp
Use of embryonating eggs for isolation of *Campylobacter* species from intestines of swine with proliferative enteritis, 810
CARBOHYDRATES
Evaluation of carbohydrate malassimilation and intestinal transit time in cats by measurement of breath hydrogen excretion, 1104
CARBON DIOXIDE
Association of environmental air contaminants with disease and productivity in swine, 1725
CARBON DIOXIDE PARTIAL PRESSURE
Urine-blood carbon dioxide tension gradient in healthy dogs, 236
CARBOXYMETHYLCELLULOSE
Evaluation of sodium carboxymethylcellulose for prevention of experimentally induced abdominal adhesions in ponies, 88
CARDIAC OUTPUT
Thermodilution estimation of cardiac output at high flows in anesthetized horses, 1893
CARDIOVASCULAR SYSTEM
Cardiopulmonary function values before and after heartworm removal in dogs with caval syndrome, 126
Comparison of the hemodynamic effects of halothane alone and halothane combined with epidurally administered morphine for anesthesia in ventilated dogs, 505
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576
Cardiovascular effects of xylazine and detomidine in horses, 651
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
Effects of mechanical and pharmacologic manipulations on portal pressure, central venous pressure, and heart rate in dogs, 1327
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Effects of a highly concentrated hypertonic saline-dextran volume expander on cardiopulmonary function in anesthetized normovolemic horses, 1611
CAROTID SINUS
Gross and histologic study of the rostral epidural rete mirabile and the cavernous sinus in one-humped camels, 1173
CARPUS
Morphologic study of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of glued periosteal

autografts, 317
Correction: 636
Biochemical study of repair of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of periosteal autografts, 328
Mechanical and morphometric analysis of the third carpal bone of Thoroughbreds, 402

CARTILAGE
Effects of intra-articular administration of methylprednisolone acetate on normal equine articular cartilage, 83
Proteoglycan synthesis and content in articular cartilage and cartilage repair tissue in horses, 1004
Influence of polysulfated glycosaminoglycan on equine articular cartilage in explant culture, 1622

CASTRATION
Effects of bacterial infection and castration on prostatic tissue zinc concentration in dogs, 1262

CATION INFLUX
Erythrocyte cation content and sodium transport in Siberian Huskies, 1427

CATS
Pudendal reflexes and effects of conditioning stimuli in cats, 18
Comparison of genitoanal and bulbospongiosus reflexes and measurement of penile nerve conduction velocity in cats, 24
Measurement of anal and genitoanal reflexes in cats, 29
Age-related changes in protein concentrations in serum and respiratory tract lavage fluid obtained from cats, 254
Use of fine-wire electrodes for electromyographic evaluation of the external urethral sphincter during urethral pressure profilometry in male cats, 314
Changes in serum immunoglobulin values in kittens after ingestion of colostrum, 393
Radioimmunoassay of parathyroid hormone in cats, 422
Fungal flora of the coat of pet cats, 602
Retrograde flow of spermatozoa into the urinary bladder of cats during electroejaculation, collection of semen with an artificial vagina, and mating, 687
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
Comparison of four methods of estimating glomerular filtration rate in cats, 961
Correction: 1742
Evaluation of carbohydrate malassimilation and intestinal transit time in cats by measurement of breath hydrogen excretion, 1104
Quantitative urinalysis in kittens from four to thirty weeks after birth, 1295
Cytologic, microbiologic, and biochemical analysis of bronchoalveolar lavage fluid obtained from 24 healthy cats, 1300
Functional analysis of ectopic parathyroid activity in cats, 1336
Evaluation of two applanation tonometers in cats, 1917
Cutaneous laser-Doppler velocimetry in nine animal species, 1960

CATS, DISEASES
Prospective vaccine prepared from a new mutant of *Toxoplasma gondii* for use in cats, 759
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747
Variable suppression of feline bone marrow fibroblast colony-forming units by two isolates of feline leukemia virus, 1924

CATS, DRUGS AND TREATMENT
Effect of sodium bicarbonate infusion on serum osmolality, electrolyte concentrations, and blood gas tensions in cats, 12
Evaluation of praziquantel for treatment of experimentally induced paragonimiasis in dogs and cats, 68
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in cats, 436
Effects of topical administration of 2.0% pilocarpine on intraocular pressure and pupil size in cats, 441
Serum glucose and insulin responses to an insulin-containing ophthalmic solution administered topically in clinically normal cats, 903
Effect of humidification on the airways of cats during high-frequency ventilation, 1474
Prophylactic and therapeutic effects of phosphonoformate against feline leukemia virus in vitro, 2010

CATTLE
Renal clearance and fractional excretion of electrolytes over four 6-hour periods in cattle, 5
Lysozyme concentrations in the tears of cattle, goats, and sheep, 9
Toxicity of pyrrolizidine alkaloids from Riddell groundsel (*Senecio riddellii*) to cattle, 146
Application of renal microangiography to normal and diseased kidneys of cattle and mice, 157
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Quantitation of bovine immunoglobulins in culture fluids by use of sandwich radioimmunoassay with monoclonal antibodies, 243
Inhibition of lymphocyte blastogenesis by whey, 247
Pharmacologic enhancement or suppression of phagocytosis by bovine neutrophils, 363
Decreased respiratory burst activity in neonatal bovine neutrophils stimulated by protein kinase C agonists, 375
Lysis of bovine platelets by *Pasteurella haemolytica* leukotoxin, 453
Use of flow cytometry for determination of differential leukocyte counts in bovine blood, 630
Effects of postmilking teat treatment on the colonization of *Staphylococcus aureus* on chapped teat skin, 799
Secretion of interleukin-1 by bovine milk macrophages, 858
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Celiac trunk cannulation for obtaining abomasal lymph from cattle, 1117
Serologic enzyme-linked immunosorbent assay responses of calves vaccinated with a killed *Mycobacterium paratuberculosis* vaccine, 1197
Flow cytometric study of oxidative burst activity in bovine neutrophils, 1201
Plasminogen activator production by bovine milk macrophages and blood monocytes, 1208
Developmental changes in the regulation of plasma growth hormone concentrations in Holstein calves, 1397
Comparison of methods to determine glucose kinetics and measurement of recycling and lactose formation in lactating cows, 1407
Pharmacokinetics and synovial fluid concentrations of cephapirin in calves with suppurative arthritis, 1438
Effects on aflatoxin M_1 residues in milk by addition of hydrated sodium calcium aluminosilicate to aflatoxin-contaminated diets of dairy cows, 1556
Pulmonary particle deposition and airway mucociliary clearance in cold-exposed calves, 1665
Modulation of function of bovine polymorphonuclear leukocytes and lymphocytes by high temperature in vitro and in vivo, 1692
Market stress-associated changes in serum complement activity in feeder calves, 1842
Ultrasonographic examination of the right kidney in cows, 1938
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
Serum liver enzyme and histopathologic changes in calves with chronic and chronic-delayed *Senecio jacobaea* toxicosis, 1969
Heterogeneity in phagocytic and nitroblue tetrazolium reductive properties of neutrophils from cows, 2023
Changes in the bovine teat canal during the nonlactating period and early lactation, as measured by teat canal impressions, 2075

CATTLE, DISEASES
Gram-negative bacterial infections of the mammary gland in cows, 184
Serodiagnosis of bovine paratuberculosis by use of a dot enzyme-linked immunosorbent assay, 217
Immunohistologic examination of monoclonal antibodies generated against *Eimeria bovis* sporozoites for reactivity to meronts and sexual stages of *E bovis* and other eimerian parasites, 239
Lesions and localization of viral antigen in tissues of cattle with experimentally induced or naturally acquired mucosal disease, or with naturally acquired chronic bovine viral diarrhea, 269
Changes in blood and bronchoalveolar lavage fluid components in calves with experimentally induced pneumonic pasteurellosis, 337
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381
Abortifacient property of bovine herpesvirus type 1 isolates that represent three subtypes determined by restriction endonuclease analysis of viral DNA, 458

Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462
Quantitative and qualitative properties of host polymorphonuclear cells during experimentally induced *Staphylococcus aureus* mastitis in cows, 474
Description of a scale for rating the clinical response of cattle poisoned by larkspur, 488
Clinical and biochemical alterations in calves with nutritionally induced polioencephalomalacia (Pub December 1990, p 1969)
Correction: 514
Vaccination of calves with a modified bacterin or oil-in-water emulsion containing alkali-detoxified *Salmonella typhimurium* lipopolysaccharide, 596
Changes in phospholipids of alveolar lining material in calves after aerosol exposure to bovine herpesvirus-1 or parainfluenza-3 virus, 675
Isotype-specific antibody responses to bovine coronavirus structural proteins in serum, feces, and mucosal secretions from experimentally challenge-exposed colostrum-deprived calves, 692
Mucosal and systemic antibody responses to bovine coronavirus structural proteins in experimentally challenge-exposed calves fed low or high amounts of colostral antibodies, 700
Association between solar radiation and ocular squamous cell carcinoma in cattle, 784
Hepatic ultrasonography and blood changes in cattle with experimentally induced hepatic abscesses, 803
Epidemiologic factors and isotype-specific antibody responses in serum and mucosal secretions of dairy calves with bovine coronavirus respiratory tract and enteric tract infections, 845
Mucosal and systemic isotype-specific antibody responses to bovine coronavirus structural proteins in naturally infected dairy calves, 852
Replication of parainfluenza type-3 virus and bovine respiratory syncytial virus in isolated bovine type-II alveolar epithelial cells, 880
Serologic detection and practical consequences of antigenic diversity among bovine viral diarrhea viruses in a vaccinated herd, 1033
Determination of ability of a thymidine kinase-negative deletion mutant of bovine herpesvirus-1 to cause abortion in cattle, 1038
N-acetyl-β-D-glucosaminidase as a predictor of milk loss and recovery after clinical mastitis, 1110
High sulfide concentrations in rumen fluid associated with nutritionally induced polioencephalomalacia in calves, 1164
Monitoring bovine viral diarrhea virus vaccines for adventitious virus, using T1 ribonuclease viral RNA oligonucleotide fingerprinting, 1237
Effects of bovine respiratory syncytial virus on airway function in neonatal calves, 1401
Effect of vaccination with the R mutant *Escherichia coli* (J5) antigen on morbidity and mortality of dairy calves, 1492
Comparison of natural transmission of bovine leukemia virus in Holstein cows of two genetic lines selected for high and average milk production, 1551
Effect of vaccination with a monovalent *Leptospira interrogans* serovar *hardjo* type hardjo-bovis vaccine on type hardjo-bovis infection of cattle, 1639
Mass screening of cattle sera against 14 infectious disease agents, using an ELISA system for monitoring health in livestock, 1699
Pathophysiologic effects of *Ostertagia ostertagi* in calves and their prevention by strategic anthelmintic treatments, 1706
Epizootiology of helminth parasitism in a beef cow/calf herd in Minnesota, 1712
Survey to estimate prevalence of *Leptospira interrogans* infection in mature cattle in the United States, 1761
Relationships between prevalence of *Leptospira interrogans* in cattle, and regional, climatic, and seasonal factors, 1766
Association of diarrhea in cattle with torovirus infections on farms, 1769
Effect of *Pasteurella haemolytica* saline capsular extract on bovine pulmonary endothelial cells, 1774
Effect of stage of gestation on efficacy of *Brucella abortus* strain-19 vaccination in cattle, 1848

CATTLE, DRUGS AND TREATMENT
Efficacy of ivermectin administered via sustained-release bolus against gastrointestinal nematodes in cattle, 62
Hemodynamic response of endotoxemic calves to treatment with small-volume hypertonic saline solution, 981
Respiratory, renal, hematologic, and serum biochemical effects of hypertonic saline solution in endotoxemic calves, 990
Antagonistic effect of atipamezole on xylazine-induced sedation, bradycardia, and ruminal atony in calves, 1265
Respiratory tract distribution and bioavailability of spiramycin in calves, 1269
Tumor necrosis factor as a potential mediator of acute metabolic and hormonal responses to endotoxemia in calves, 1320
Antibiotic and sulfonamide agents in bob veal calf muscle, liver, and kidney, 1383
Hemodynamic response of calves to tiletamine-zolazepam-xylazine anesthesia, 1606
Pathologic changes, tissue distribution, and extent of conversion to ethylenethiourea after subacute administration of zinc ethylene-bis-dithiocarbamate (zineb) to calves with immature rumen function, 1717
In vitro and in vivo 2′,5′-oligoadenylate synthetase activity induced by recombinant DNA-derived bovine interferon αI1 in bovine alveolar macrophages and blood mononuclear cells, 1779
Evaluation of edetate and thiamine for treatment of experimentally induced environmental lead poisoning in cattle, 1860
Evaluation of multiple reticulorumen selenium pellets as a health risk in growing Hereford steers, 1866

CAVAL SYNDROME
Cardiopulmonary function values before and after heartworm removal in dogs with caval syndrome, 126

CAVERNOUS SINUS
Gross and histologic study of the rostral epidural rete mirabile and the cavernous sinus in one-humped camels, 1173

CECUM
In vitro transport of cycloleucine by equine cecal mucosa, 539
Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses, 1153
Microvascular circulation of the cecum in horses, 1545

CELLS, CULTURED
Antigen expression in cultured oral keratinocytes from dogs, 445
Ultrastructure of developing *Isospora suis* in cultured cells, 471

CEPHAPIRIN
Pharmacokinetics and synovial fluid concentrations of cephapirin in calves with suppurative arthritis, 1438

CERULOPLASMIN
Haptoglobin and ceruloplasmin as determinants of inflammation in dogs, 1738
Isolation, characterization, and quantitative analysis of ceruloplasmin from horses, 1979

CHANNEL CATFISH VIRUS
Use of polymerase chain reaction to detect latent channel catfish virus, 1965

CHEDIAK-HIGASHI SYNDROME
Platelet aggregation, storage pool deficiency, and protein phosphorylation in mice with Chediak-Higashi syndrome, 945

CHEMOTACTIC FACTORS
Analysis of selected variables in the under-agarose assay for chemotactic responses of canine neutrophils, 965
Detection of chemotactic factors in preovulatory follicular fluid from mares, 1412

CHICKENS
Characterization of proteins in sporulated and unsporulated *Eimeria maxima* oocysts, 72
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Granulopoiesis in the pineal gland of chickens, 449
Colonization control of lactose-fermenting *Salmonella typhimurium* in young broiler chickens by use of dietary lactose, 833
Use of a multivariable indexing score for hygiene variables in relation to egg production, 970
Enzyme-linked immunosorbent assay for the detection of *Salmonella enteritidis* infection in chickens, 1069
Identification and characterization of viral polypeptides from type-II avian adenoviruses, 1137
Effect of intestinal microflora on digestible energy and fiber digestion in chickens fed a high-fiber diet, 1178
Use of corticosterone and ampicillin for treatment of *Streptococcus faecalis* infection in chickens, 1288
Comparison of phenotypic characteristics of *Salmonella* spp isolated from healthy and ill (infected) chickens, 1512
Comparative study of colonizing and noncolonizing *Campylobacter jejuni*, 1518

Identification of *Mycoplasma gallisepticum* by use of monoclonal antibody in a rapid slide agglutination test, 1602
Resistance to fecal shedding of salmonellae in pigs and chickens vaccinated with an aromatic-dependent mutant of *Salmonella typhimurium*, 1784
Morphologic characterization of conjunctiva-associated lymphoid tissue in chickens, 1852

CHLORAMPHENICOL
Influence of age on the disposition kinetics of chloramphenicol in equine neonates, 426

CHLORIDE
Replacement of chloride deficit by use of 1.8% NaCl to correct experimentally induced hypochloremic metabolic alkalosis in sheep, 1898

CILIA
Atypical cilia in the oviductal epithelium of healthy prepubertal gilts, 101

CIMETIDINE
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658
Nuclear imaging of the stomach of healthy dogs, 1081

CIRCULATION, HEPATIC
Effect of left hepatic vein ligation on hepatic circulation, function, and microanatomy in dogs, 774

CIRCULATION, MICROVASCULAR
Microvascular circulation of the cecum in horses, 1545

CISPLATIN
Effect of time of cisplatin administration on its toxicity and pharmacokinetics in dogs, 1821

CLEARANCE, MUCOCILIARY
Pulmonary particle deposition and airway mucociliary clearance in cold-exposed calves, 1665

CLORSULON
Efficacy of clorsulon for the treatment of experimentally induced infections of *Fasciola hepatica* in goats, 111

Clostridium perfringens
Differences in signs and lesions in sheep and goats with enterotoxemia induced by intraduodenal infusion of *Clostridium perfringens* type D, 1147

COAGULATION
Influence of an ω-3 fatty acid-enriched ration on in vivo responses of horses to endotoxin, 523
Effects of exploratory laparatomy on plasma and peritoneal coagulation/fibrinolysis in horses, 1121

COLD
Pulmonary particle deposition and airway mucociliary clearance in cold-exposed calves, 1665

COLIC
Use of newly developed assays for protein C and plasminogen in horses with signs of colic, 345
Serum tumor necrosis factor activity in horses with colic attributable to gastrointestinal tract disease, 1565
Multivariable prediction model for the need for surgery in horses with colic, 1903

COLITIS
Evaluation of *Campylobacter jejuni* colonization of the domestic ferret intestine as a model of proliferative colitis, 826

COLLAGEN
Effects of a proprietary topical medication on wound healing and collagen deposition in horses, 1128

COLON
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289

COLOSTRUM
Changes in serum immunoglobulin values in kittens after ingestion of colostrum, 393
Effect of colostrum ingestion on gamma-glutamyltransferase and alkaline phosphatase activities in neonatal pups, 499
Isotype-specific antibody responses to bovine coronavirus structural proteins in serum, feces, and mucosal secretions from experimentally challenge-exposed colostrum-deprived calves, 692
Mucosal and systemic antibody responses to bovine coronavirus structural proteins in experimentally challenge-exposed calves fed low or high amounts of colostral antibodies, 700
Evaluation of intravenous administration of concentrated immunoglobulin G to colostrum-deprived foals, 709
Use of adult dog serum as a substitute for colostrum in the neonatal dog, 1221

COMING MEETINGS AND CERTIFICATION EXAMINATIONS, 174, 515, 789, 974, 1190, 1388, 1560, 1754, 1928, 2080

COMPLEMENT
Activation of rainbow trout complement by C-reactive protein, 397
Market stress-associated changes in serum complement activity in feeder calves, 1842

COMPLIANCE, THORACIC
Static thoracic compliance as a measurement of pulmonary function in dogs, 1597

CONJUNCTIVA
Bacterial and mycoplasmal flora of the healthy camelid conjunctival sac, 1061
Morphologic characterization of conjunctiva-associated lymphoid tissue in chickens, 1852

CORNEA
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781
Canine corneal thickness measured by ultrasonic pachymetry, 1570
Correlation of morpholgic features of the iridocorneal angle to intraocular pressure in Samoyeds, 1875

CORONAVIRUSES
Isotype-specific antibody responses to bovine coronavirus structural proteins in serum, feces, and mucosal secretions from experimentally challenge-exposed colostrum-deprived calves, 692
Mucosal and systemic antibody responses to bovine coronavirus structural proteins in experimentally challenge-exposed calves fed low or high amounts of colostral antibodies, 700
Epidemiologic factors and isotype-specific antibody responses in serum and mucosal secretions of dairy calves with bovine coronavirus respiratory tract and enteric tract infections, 845
Mucosal and systemic isotype-specific antibody responses to bovine coronavirus structural proteins in naturally infected dairy calves, 852

CORTICOSTEROIDS
Comparison of high-performance liquid chromatography with a radiometric assay for determination of the effect of intra-articular administration of corticosteroid and saline solution on synovial fluid hyaluronate concentration in horses, 1940

CORTICOSTERONE
Use of corticosterone and ampicillin for treatment of *Streptococcus faecalis* infection in chickens, 1288

CORTISOL
Plasma free cortisol concentrations in dogs with hyperadrenocorticism, 682
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489

Corynebacterium pseudotuberculosis
Transformation of *Corynebacterium pseudotuberculosis* by electroporation, 1258

CREATINE KINASE
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527

CREATININE CLEARANCE
Exogenous creatinine clearance as a measure of glomerular filtration rate in dogs with reduced renal mass, 1029

CYSTICERCOSIS
Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462

CYTOKERATIN
Immunocytochemical study of tissues from clinically normal dogs and of neoplasms, using keratin monoclonal antibodies, 613

CYTOTOXICITY, IMMUNOLOGIC
Cytotoxicity against autologous, allogeneic, and xenogeneic tumor targets by human recombinant interleukin-2-activated lymphocytes from healthy dogs and dogs with lung tumors, 1132
Effects of human recombinant interleukin 2 on in vitro tumor cytotoxicity in dogs, 2029

DEER
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Characterization by restriction endonuclease analysis and seroagglutination of strains of *Mycobacterium avium* and *Mycobacterium intracellulare* obtained from farmed deer, 197
DETOMIDINE
Cardiovascular effects of xylazine and detomidine in horses, 651
DEXTRAN
Hypertonic saline/dextran resuscitation of dogs with experimentally induced gastric dilatation-volvulus shock, 92
Effects of a highly concentrated hypertonic saline-dextran volume expander on cardiopulmonary function in anesthetized normovolemic horses, 1611
DIABETES MELLITUS, EXPERIMENTAL
Effects of dietary fiber supplementation on glycemic control in dogs with alloxan-induced diabetes mellitus, 2060
DIARRHEA
Association of diarrhea in cattle with torovirus infections on farms, 1769
DIAZEPAM
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
DIET
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
Influence of an ω-3 fatty acid-enriched ration on in vivo responses of horses to endotoxin, 523
Effect of intestinal microflora on digestible energy and fiber digestion in chickens fed a high-fiber diet, 1178
Effect of diet on gentamicin-induced nephrotoxicosis in horses, 1274
Effect of dietary protein on functional, morphologic, and histologic changes of the kidney during compensatory renal growth in dogs, 1357
Effects of diet on acidic and neutral goblet cell populations in the small intestine of early weaned pigs, 1743
DIMETHYL SULFOXIDE
Evaluation of use of dimethyl sulfoxide for intra-articular lavage in clinically normal horses, 333
Effects of intra-articular administration of dimethylsulfoxide on chemically induced synovitis in immature horses, 934
Dipylidium caninum
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum*, *Dipylidium caninum*, and *Trichuris vulpis* in dogs, 574
DIPYRIDAMOLE
Effects of treatment with aspirin or aspirin/dipyridamole combination in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 1992
Dirofilaria immitus
Efficacy of ivermectin chewable tablets and two new ivermectin tablet formulations against *Dirofilaria immitis* larvae in dogs, 1922
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986
Effects of treatment with aspirin or aspirin/dipyridamole combination in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 1992
Effects of treatment with ticlopidine in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 2000
Chemoprophylactic effects of milbemycin oxime against larvae of *Dirofilaria immitus* during prepatent development, 2040
DIROFILARIASIS
Cardiopulmonary function values before and after heartworm removal in dogs with caval syndrome, 126
DNA, BACTERIAL
Characterization and comparison of antimicrobial susceptibilities and outer membrane protein and plasmid DNA profiles of *Pasteurella haemolytica* and certain other members of the genus *Pasteurella*, 2016
DNA, GENOMIC
Proto-oncogenes of genomic DNA in clinically normal animals of various species, 940
DNA, NEOPLASM
Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046
DNA, VIRAL
Abortifacient property of bovine herpesvirus type 1 isolates that represent three subtypes determined by restriction endonuclease analysis of viral DNA, 458
Location of open reading frame coding for equine herpesvirus type-1 glycoproteins with homology to gE and gI of herpes simplex virus, 1252
DNA FINGERPRINTING
Monitoring bovine viral diarrhea virus vaccines for adventitious virus, using T1 ribonuclease viral RNA oligonucleotide fingerprinting, 1237
DNA RESTRICTION ENZYMES
Characterization by restriction endonuclease analysis and seroagglutination of strains of *Mycobacterium avium* and *Mycobacterium intracellulare* obtained from farmed deer, 197
DOGS
Comparison of the width of the intervertebral disk space and radiographic changes before and after intervertebral disk fenestration in dogs, 140
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Postnatal development of the visual-evoked potential in dogs, 231
Urine-blood carbon dioxide tension gradient in healthy dogs, 236
Electrophysiologic studies of the cutaneous innervation of the pelvic limb of male dogs, 352
Postnatal development of the brain stem auditory-evoked potential in dogs, 410
Antigen expression in cultured oral keratinocytes from dogs, 445
Effect of colostrum ingestion on gamma-glutamyltransferase and alkaline phosphatase activities in neonatal pups, 499
Use of pulsed-wave Doppler echocardiography to determine aortic and pulmonary velocity and flow variables in clinically normal dogs, 543
Variance of indirect blood pressure measurements and prevalence of hypertension in clinically normal dogs, 561
Immunocytochemical study of tissues from clinically normal dogs and of neoplasms, using keratin monoclonal antibodies, 613
Potential attachment area of the fourth maxillary premolar in dogs, 626
Evaluation of flow cytometric counting procedure for canine reticulocytes by use of thiazole orange, 723
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781
Axial pattern flap based on the caudal auricular artery in dogs, 922
Comparison of nonionic contrast agents iohexol and iotrolan for cisternal myelography in dogs, 926
Analysis of selected variables in the under-agarose assay for chemotactic responses of canine neutrophils, 965
Influence of type of enclosure on exercise fitness of dogs, 1024
Exogenous creatinine clearance as a measure of glomerular filtration rate in dogs with reduced renal mass, 1029
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Nuclear imaging of the stomach of healthy dogs, 1081
Use of a nuclear imaging technique to detect gastric wall ischemia, 1089
Comparison of inhalation-to-perfusion ratio in anesthetized dogs with barrel-shaped thorax vs dogs with deep thorax, 1097
Cytotoxicity against autologous, allogeneic, and xenogeneic tumor targets by human recombinant interleukin-2-activated lymphocytes from healthy dogs and dogs with lung tumors, 1132
Kinetics of uptake and effects of topical indomethacin application on protein concentration in the aqueous humor of dogs, 1159
Use of adult dog serum as a substitute for colostrum in the neonatal dog, 1221
Antigenic analysis of four species of the genus *Ehrlichia* by use of protein immunoblot, 1225
Effects of bacterial infection and castration on prostatic tissue zinc concentration in dogs, 1262
Pigment epithelial function in canine retina, 1341
Effect of dietary protein on functional, morphologic, and histologic changes of the kidney during compensatory renal growth in dogs, 1357
Erythrocyte cation content and sodium transport in Siberian Huskies, 1427
Fluorophotometric evaluation of experimental blood-aqueous barrier disruption in dogs, 1433

Canine corneal thickness measured by ultrasonic pachymetry, 1570
Urine metabolite values in fed and nonfed clinically normal Beagles, 1573
Changes in linear dimensions of the heart, relative to body weight, as measured by M-mode echocardiography in growing dogs, 1591
Static thoracic compliance as a measurement of pulmonary function in dogs, 1597
Pharmacokinetic properties of doxorubicin encapsulated in glutaraldehyde-treated canine erythrocytes, 1630
Evaluation of the instantaneous centers of rotation of the stifle before and after repair of torn cruciate ligament by use of the over-the-top technique in dogs, 1731
Haptoglobin and ceruloplasmin as determinants of inflammation in dogs, 1738
Correlation of morpholgic features of the iridocorneal angle to intraocular pressure in Samoyeds, 1875
Morphologic and morphometric study of the facial nerve in clinically normal adult dogs, 1879
Relationship between urine ammonium ion excretion and urine anion gap in dogs, 1956
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
Measurement of estrogen receptors in normal and neoplastic lymph node tissue from dogs, 2055

DOGS, DISEASES
In vitro characteristics of normal and dystrophic skeletal muscle from dogs, 104
Prophylactic efficacy of four antibacterial shampoos against *Staphylococcus intermedius* in dogs, 115
von Willebrand factor in lysates of washed canine platelets, 119
Cardiopulmonary function values before and after heartworm removal in dogs with caval syndrome, 126
Effects of thromboxane synthetase inhibition on immune complex glomerulonephritis, 480
Serologic and blood culture survey of *Trypanosoma cruzi* infection in four canine populations of southern Louisiana, 570
Plasma free cortisol concentrations in dogs with hyperadrenocorticism, 682
Erythrocyte insulin receptors in dogs with spontaneous hyperadrenocorticism, 917
Clinical, clinicopathologic, and parasitologic observations of trypanosomiasis in dogs infected with North American *Trypanosoma cruzi* isolates, 954
Prevalence of calcium oxalate uroliths in Miniature Schnauzers, 1579
Evaluation of urine and serum metabolites in Miniature Schnauzers with calcium oxalate urolithiasis, 1583
Effect of a passive heat and moisture exchanger on esophageal temperature in tumor-bearing dogs during whole-body hyperthermia, 1688
Atrial natriuretic peptide concentration in dogs with congestive heart failure, chronic renal failure, and hyperadrenocorticism, 1831
Pathologic features of dogs inoculated with North American *Trypanosoma cruzi* isolates, 2033
Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046
Effects of dietary fiber supplementation on glycemic control in dogs with alloxan-induced diabetes mellitus, 2060

DOGS, DRUGS AND TREATMENT
Effects of milbemycin oxime on adult *Ancylostoma caninum* and *Uncinaria stenocephala* in dogs with experimentally induced infections, 64
Evaluation of praziquantel for treatment of experimentally induced paragonimiasis in dogs and cats, 68
Hypertonic saline/dextran resuscitation of dogs with experimentally induced gastric dilatation-volvulus shock, 92
Effect of oral administration of prednisolone on thyroid function in dogs, 416
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in dogs, 432
Comparison of the hemodynamic effects of halothane alone and halothane combined with epidurally administered morphine for anesthesia in ventilated dogs, 505
Quantitative electroencephalography in dogs anesthetized with 2.0% end-tidal concentration of isoflurane anesthesia, 551
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum*, *Dipylidium caninum*, and *Trichuris vulpis* in dogs, 574
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576
Comparative study of the pharmacokinetics of alfentanil in rabbits, sheep, and dogs, 581
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658
Effect of midazolam preanesthetic administration on thiamylal induction requirements in dogs, 662
Effect of left hepatic vein ligation on hepatic circulation, function, and microanatomy in dogs, 774
Phagocytosis and erythrocyte antibody-rosette formation by three populations of mononuclear phagocytes obtained from dogs treated with glucocorticoids, 869
Effects of amiodarone on myocardial performance in normal canine hearts and canine hearts with infarcts, 891
Pharmacodynamic properties of succinylcholine in Greyhounds, 898
Effect of milbemycin oxime against *Ancylostoma caninum* in dogs with naturally acquired infection, 951
Assessment of toxicosis induced by high-dose administration of milbemycin oxime in Collies, 1170
Acute effects of anti-inflammatory drugs on neodymium:yttrium aluminum garnet laser-induced uveitis in dogs, 1279
Effects of mechanical and pharmacologic manipulations on portal pressure, central venous pressure, and heart rate in dogs, 1327
Effect of flurbiprofen on facility of aqueous outflow in the eyes of dogs, 1448
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452
Influence of sedative and anesthetic agents on intradermal skin test reactions in dogs, 1484
Effects of nitroscanate on adult *Taenia pisiformis* in dogs with experimentally induced infections, 1542
Preclinical evaluation of L-asparaginase and methotrexate administered at intermediate doses, 1636
Effect of time of cisplatin administration on its toxicity and pharmacokinetics in dogs, 1821
Dose response of butorphanol administered subcutaneously to increase visceral nociceptive threshold in dogs, 1826
Efficacy of ivermectin chewable tablets and two new ivermectin tablet formulations against *Dirofilaria immitis* larvae in dogs, 1922
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948
In vitro assay of nuclear uptake of doxorubicin hydrochloride in osteosarcoma cells of dogs, 1951
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986
Effects of treatment with aspirin or aspirin/dipyridamole combination in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 1992
Effects of treatment with ticlopidine in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 2000
Effects of human recombinant interleukin 2 on in vitro tumor cytotoxicity in dogs, 2029
Evaluation of a topically administered carbonic anhydrase inhibitor (MK-927) in normotensive and glaucomatous Beagles, 2067

DOXORUBICIN
Pharmacokinetic properties of doxorubicin encapsulated in glutaraldehyde-treated canine erythrocytes, 1630
In vitro assay of nuclear uptake of doxorubicin hydrochloride in osteosarcoma cells of dogs, 1951

DUCKS
Reversibility of furazolidone-induced cardiotoxicosis in ducklings, 1366
Early clinical and morphologic alterations in the pathogenesis of furazolidone-induced toxicosis in ducklings, 1531

DUODENUM
Differences in signs and lesions in sheep and goats with enterotoxemia induced by intraduodenal infusion of *Clostridium perfringens* type D, 1147

DUST
Association of environmental air contaminants with disease and productivity in swine, 1725

EAR
Ototoxic potential of gentamicin in ponies, 494
ECHOCARDIOGRAPHY
Use of pulsed-wave Doppler echocardiography to determine aortic and pulmonary velocity and flow variables in clinically normal dogs, 543
Changes in linear dimensions of the heart, relative to body weight, as measured by M-mode echocardiography in growing dogs, 1591
EDETATE
Evaluation of edetate and thiamine for treatment of experimentally induced environmental lead poisoning in cattle, 1860
EGG PRODUCTION
Use of a multivariable indexing score for hygiene variables in relation to egg production, 970
Ehrlichia platys
Evaluation of *Rhipicephalus sanguineus* as a potential biologic vector of *Ehrlichia platys*, 1537
Ehrlichia spp
Antigenic analysis of four species of the genus *Ehrlichia* by use of protein immunoblot, 1225
EICOSANOIDS
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289
Eimeria bovis
Immunohistologic examination of monoclonal antibodies generated against *Eimeria bovis* sporozoites for reactivity to meronts and sexual stages of *E bovis* and other eimerian parasites, 239
Eimeria maxima
Characterization of proteins in sporulated and unsporulated *Eimeria maxima* oocysts, 72
EJACULATION
Retrograde flow of spermatozoa into the urinary bladder of cats during electroejaculation, collection of semen with an artificial vagina, and mating, 687
ELECTROENCEPHALOGRAPHY
Quantitative electroencephalography in dogs anesthetized with 2.0% end-tidal concentration of isoflurane anesthesia, 551
ELECTROLYTES
Renal clearance and fractional excretion of electrolytes over four 6-hour periods in cattle, 5
Effect of sodium bicarbonate infusion on serum osmolality, electrolyte concentrations, and blood gas tensions in cats, 12
ELECTROMYOGRAPHY
Use of fine-wire electrodes for electromyographic evaluation of the external urethral sphincter during urethral pressure profilometry in male cats, 314
ELECTROPHORESIS
Characterization of eugonic fermenters group EF-4 by polyacrylamide gel electrophoresis and protein immunoblot analysis, 1065
Electrophoretic profiles of *Pasteurella multocida* isolates from animals with hemorrhagic septicemia, 1644
ELECTROPHYSIOLOGY
Electrophysiologic studies of the cutaneous innervation of the pelvic limb of male dogs, 352
ELECTROPORATION
Transformation of *Corynebacterium pseudotuberculosis* by electroporation, 1258
EMBRYOS
Effect of administration of phenylbutazone or progesterone on recovery of embryos from the uterus of mares 5 days after ovulation, 678
ENCEPHALITIS
Risk factors associated with caprine arthritis-encephalitis virus infection in goats on California dairies, 510
ENCEPHALOMYOCARDITIS VIRUS
Characterization of encephalomyocarditis virus isolated from aborted swine fetuses, 1649
ENDOSCOPY
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948
ENDOTHELIUM, PULMONARY
Effect of *Pasteurella haemolytica* saline capsular extract on bovine pulmonary endothelial cells, 1774
ENDOTOXEMIA
Evaluation of progesterone deficiency as a cause of fetal death in mares with experimentally induced endotoxemia, 282
Hemodynamic response of endotoxemic calves to treatment with small-volume hypertonic saline solution, 981
Respiratory, renal, hematologic, and serum biochemical effects of hypertonic saline solution in endotoxemic calves, 990
Tumor necrosis factor as a potential mediator of acute metabolic and hormonal responses to endotoxemia in calves, 1320
ENDOTOXIN
Effects of flunixin meglumine on endotoxin-induced prostaglandin $F_{2\alpha}$ secretion during early pregnancy in mares, 276
Effect of dietary α-linolenic acid on endotoxin-induced production of tumor necrosis factor by peritoneal macrophages in horses, 528
Influence of an ω-3 fatty acid-enriched ration on in vivo responses of horses to endotoxin, 523
Tumor necrosis factor activity in the circulation of horses given endotoxin, 533
Association of environmental air contaminants with disease and productivity in swine, 1725
ENROFLOXACIN
Pharmacokinetic properties of enrofloxacin in rabbits, 1835
ENTEROTOXEMIA
Susceptibility of Chinese Meishan and European Large White pigs to enterotoxigenic *Escherichia coli* strains bearing colonization factor K88, 987P, K99, or F41, 40
Relationship between virulence and adherence of various enterotoxigenic *Escherichia coli* strains to isolated intestinal epithelial cells from Chinese Meishan and European Large White pigs, 45
Evaluation of a live avirulent *Escherichia coli* vaccine for K88$^+$, LT$^+$ enterotoxigenic colibacillosis in weaned pigs, 1051
Differences in signs and lesions in sheep and goats with enterotoxemia induced by intraduodenal infusion of *Clostridium perfringens* type D, 1147
ENTEROTOXIN
Intestinal responses to enterotoxigenic *Escherichia coli* heat-stable toxin b in non-porcine species, 734
ENVIRONMENT
Use of a multivariable indexing score for hygiene variables in relation to egg production, 970
Association of environmental air contaminants with disease and productivity in swine, 1725
Relationships between prevalence of *Leptospira interrogans* in cattle, and regional, climatic, and seasonal factors, 1766
ENZYME-LINKED IMMUNOSORBENT ASSAY
Evaluation of an indirect enzyme-linked immunosorbent assay for screening antibody against aflatoxins, 222
ENZYMES, HEPATIC
Serum liver enzyme and histopathologic changes in calves with chronic and chronic-delayed *Senecio jacobaea* toxicosis, 1969
EPIDEMIOLOGY
Case-control study of fowl cholera outbreaks in meat turkeys in California from August 1985 through July 1986, 212
Correction: 639
Evaluation of age, breed, and gender as risk factors for umbilical hernia in horses of a hospital population, 637
Epizootiology of helminth parasitism in a beef cow/calf herd in Minnesota, 1712
Survey to estimate prevalence of *Leptospira interrogans* infection in mature cattle in the United States, 1761
EPIDEMIOLOGY, MOLECULAR
Molecular epidemiology of *Pasteurella multocida* in turkeys, 1345
EPIGLOTTIS
Evaluation of epiglottic augmentation by use of polytetrafluoroethylene paste in horses, 1908
EPITHELIUM, ALVEOLAR
Replication of parainfluenza type-3 virus and bovine respiratory syncytial virus in isolated bovine type-II alveolar epithelial cells, 880
EQUINE DEGENERATIVE MYELOENCEPHALOPATHY
Serially determined plasma α-tocopherol concentrations and results of the oral vitamin E absorption test in clinically normal horses and in horses with degenerative myeloencephalopathy, 908
ERYTHROCYTES
Effect of repeated phlebotomy on iron status of rhesus monkeys (*Macaca mulatta*), 728
Erythrocyte insulin receptors in dogs with spontaneous hyperadrenocorticism, 917
Erythrocyte cation content and sodium transport in Siberian Huskies, 1427
Pharmacokinetic properties of doxorubicin encapsulated in glutaraldehyde-treated canine erythrocytes, 1630
Effect of whole-body potassium depletion on plasma, erythrocyte, and

middle gluteal muscle potassium concentration of healthy, adult horses, 1676

Escherichia coli
Susceptibility of Chinese Meishan and European Large White pigs to enterotoxigenic *Escherichia coli* strains bearing colonization factor K88, 987P, K99, or F41, 40
Relationship between virulence and adherence of various enterotoxigenic *Escherichia coli* strains to isolated intestinal epithelial cells from Chinese Meishan and European Large White pigs, 45
Intestinal responses to enterotoxigenic *Escherichia coli* heat-stable toxin b in non-porcine species, 734
Evaluation of a live avirulent *Escherichia coli* vaccine for K88$^+$, LT$^+$ enterotoxigenic colibacillosis in weaned pigs, 1051
Effect of vaccination with the R mutant *Escherichia coli* (J5) antigen on morbidity and mortality of dairy calves, 1492

ESOPHAGUS
Effect of a passive heat and moisture exchanger on esophageal temperature in tumor-bearing dogs during whole-body hyperthermia, 1688

ESTRADIOL
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747

ESTRUS
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423

ETHYLENETHIOUREA
Pathologic changes, tissue distribution, and extent of conversion to ethylenethiourea after subacute administration of zinc ethylenebis- dithiocarbamate (zineb) to calves with immature rumen function, 1717

EVOKED POTENTIALS, AUDITORY
Postnatal development of the brain stem auditory-evoked potential in dogs, 410

EVOKED POTENTIALS, VISUAL
Postnatal development of the visual-evoked potential in dogs, 231

EXERCISE
Influence of type of enclosure on exercise fitness of dogs, 1024

EYE
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781
Association between solar radiation and ocular squamous cell carcinoma in cattle, 784
Serum glucose and insulin responses to an insulin-containing ophthalmic solution administered topically in clinically normal cats, 903
Effect of flurbiprofen on facility of aqueous outflow in the eyes of dogs, 1448
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452

FACIAL NERVE
Morphologic and morphometric study of the facial nerve in clinically normal adult dogs, 1879

Fasciola hepatica
Efficacy of clorsulon for the treatment of experimentally induced infections of *Fasciola hepatica* in goats, 111

FATTY ACIDS
Influence of an ω-3 fatty acid-enriched ration on in vivo responses of horses to endotoxin, 523

FELINE LEUKEMIA VIRUS
Variable suppression of feline bone marrow fibroblast colony-forming units by two isolates of feline leukemia virus, 1924
Prophylactic and therapeutic effects of phosphonoformate against feline leukemia virus in vitro, 2010

FERRETS
Evaluation of *Campylobacter jejuni* colonization of the domestic ferret intestine as a model of proliferative colitis, 826

FESCUE
Effects of the fungal endophyte *Acremonium coenophialum* in fescue on pregnant mares and foal viability, 2071

FETUS
Effects of flunixin meglumine on endotoxin-induced prostaglandin $F_{2\alpha}$ secretion during early pregnancy in mares, 276
Evaluation of progesterone deficiency as a cause of fetal death in mares with experimentally induced endotoxemia, 282
Uterine and fetal dynamics during early pregnancy in mares, 298
Abortifacient property of bovine herpesvirus type 1 isolates that represent three subtypes determined by restriction endonuclease analysis of viral DNA, 458
Characterization of encephalomyocarditis virus isolated from aborted swine fetuses, 1649

FIBER
Effects of dietary fiber supplementation on glycemic control in dogs with alloxan-induced diabetes mellitus, 2060

FIBRINOGEN
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986

FIBRINOLYSIS
Effects of exploratory laparatomy on plasma and peritoneal coagulation/fibrinolysis in horses, 1121

FISH
Activation of rainbow trout complement by C-reactive protein, 397
Use of polymerase chain reaction to detect latent channel catfish virus, 1965

FLOW CYTOMETRY
Use of flow cytometry for determination of differential leukocyte counts in bovine blood, 630
Evaluation of flow cytometric counting procedure for canine reticulocytes by use of thiazole orange, 723
Flow cytometric study of oxidative burst activity in bovine neutrophils, 1201
Detection of anti-equine neutrophil antibody by use of flow cytometry, 1883
Cutaneous laser-Doppler velocimetry in nine animal species, 1960

FLUNIXIN MEGLUMINE
Effects of flunixin meglumine on endotoxin-induced prostaglandin $F_{2\alpha}$ secretion during early pregnancy in mares, 276
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452
Use of nonimaging nuclear medicine techniques to assess the effect of flunixin meglumine on effective renal plasma flow and effective renal blood flow in healthy horses, 1619

FLUOROMETRY
Fluorophotometric evaluation of experimental blood-aqueous barrier disruption in dogs, 1433

FLURBIPROFEN, SEE PROPIONATES

FUNGI
Fungal flora of the coat of pet cats, 602
Effects of the fungal endophyte *Acremonium coenophialum* in fescue on pregnant mares and foal viability, 2071

FURAZOLIDONE
Reversibility of furazolidone-induced cardiotoxicosis in ducklings, 1366
Early clinical and morphologic alterations in the pathogenesis of furazolidone-induced toxicosis in ducklings, 1531

GALLSTONES
Prevalence of pigment gallstones in sheep, 2043

GASTRIC DILATATION-VOLVULUS
Hypertonic saline/dextran resuscitation of dogs with experimentally induced gastric dilatation-volvulus shock, 92

GASTROINTESTINAL TRACT
Effects of a histamine type-2 receptor antagonist (BMY-25386) on gastric secretion in horses, 108
Controlled test evaluation of the benzimidazole anthelmintic VET 220-S alone or with concomitant trichlorfon treatment against naturally acquired gastrointestinal parasites in ponies, 566
Steady-state response characteristics of a pulse oximeter on equine intestine, 619
Comparative studies on bioavailability and tissue uptake of two in-

traruminally or intraperitoneally administered esters of α-tocopherol in sheep, 640
Use of embryonating eggs for isolation of *Campylobacter* species from intestines of swine with proliferative enteritis, 810
Effect of intestinal microflora on digestible energy and fiber digestion in chickens fed a high-fiber diet, 1178
Fecundity of gastrointestinal trichostrongylid nematodes of sheep in the field, 1182
Serum tumor necrosis factor activity in horses with colic attributable to gastrointestinal tract disease, 1565
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948

GENETIC MARKERS
Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046

GENETICS
Effects of divergent selection for limb weakness on bone and muscle cross-sectional areas in Duroc swine, 164
Comparison of natural transmission of bovine leukemia virus in Holstein cows of two genetic lines selected for high and average milk production, 1551

GENETICS, VIRAL
Determination of ability of a thymidine kinase-negative deletion mutant of bovine herpesvirus-1 to cause abortion in cattle, 1038

GENOME
Proto-oncogenes of genomic DNA in clinically normal animals of various species, 940

GENTAMICIN
Ototoxic potential of gentamicin in ponies, 494
Effect of diet on gentamicin-induced nephrotoxicosis in horses, 1274
Kinetic study of serum gentamicin concentrations in baboons after single-dose administration, 1285

GLAUCOMA
Correlation of morpholgic features of the iridocorneal angle to intraocular pressure in Samoyeds, 1875
Evaluation of a topically administered carbonic anhydrase inhibitor (MK-927) in normotensive and glaucomatous Beagles, 2067

GLOMERULAR FILTRATION RATE
Comparison of four methods of estimating glomerular filtration rate in cats, 961
Correction: 1742
Exogenous creatinine clearance as a measure of glomerular filtration rate in dogs with reduced renal mass, 1029

GLOMERULONEPHRITIS
Effects of thromboxane synthetase inhibition on immune complex glomerulonephritis, 480

GLUCAGON
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948

GLUCOCORTICOIDS
Phagocytosis and erythrocyte antibody-rosette formation by three populations of mononuclear phagocytes obtained from dogs treated with glucocorticoids, 869

GLUCOSAMINIDASE
N-acetyl-β-D-glucosaminidase as a predictor of milk loss and recovery after clinical mastitis, 1110

GLUCOSE
Serum glucose and insulin responses to an insulin-containing ophthalmic solution administered topically in clinically normal cats, 903
Comparison of methods to determine glucose kinetics and measurement of recycling and lactose formation in lactating cows, 1407
Effects of dietary fiber supplementation on glycemic control in dogs with alloxan-induced diabetes mellitus, 2060

γ-GLUTAMYLTRANSFERASE
Effect of colostrum ingestion on gamma-glutamyltransferase and alkaline phosphatase activities in neonatal pups, 499

GLUTARALDEHYDE
Pharmacokinetic properties of doxorubicin encapsulated in glutaraldehyde-treated canine erythrocytes, 1630

GLYCOPROTEINS
Location of open reading frame coding for equine herpesvirus type-1 glycoproteins with homology to gE and gI of herpex simples virus, 1252
Antibody response to glycoprotein I in maternally immune pigs exposed to a mildly virulent strain of pseudorabies virus, 1788

GLYCOPYRROLATE
Nuclear imaging of the stomach of healthy dogs, 1081

GLYCOSAMINOGLYCANS
Influence of polysulfated glycosaminoglycan on equine articular cartilage in explant culture, 1622

GOATS
Lysozyme concentrations in the tears of cattle, goats, and sheep, 9
Efficacy of clorsulon for the treatment of experimentally induced infections of *Fasciola hepatica* in goats, 111
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Risk factors associated with caprine arthritis-encephalitis virus infection in goats on California dairies, 510
Enzyme-linked immunosorbent assay for detection of antibodies against *Mycobacterium paratuberculosis* in goats, 863
Effect of milk stasis on *Brucella abortus* infection of the mammary gland in goats, 886
Differences in signs and lesions in sheep and goats with enterotoxemia induced by intraduodenal infusion of *Clostridium perfringens* type D, 1147
Comparison of four immune variables and pulmonary lesions of goats with intrapulmonary exposure and subsequent intrathoracic challenge exposure with *Pasteurella haemolytica*, 1214
Efficacy of netobimin against *Muellerius capillaris* and resistant strain of digestive tract strongyles in dairy goats, 1313
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423

GOBLET CELLS
Effects of diet on acidic and neutral goblet cell populations in the small intestine of early weaned pigs, 1743

GONADOTROPIN-RELEASING HORMONE
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423

GRAM-NEGATIVE BACTERIA
Gram-negative bacterial infections of the mammary gland in cows, 184

GRANULOPOIESIS
Granulopoiesis in the pineal gland of chickens, 449

GRAVITY
Comparison of inhalation-to-perfusion ratio in anesthetized dogs with barrel-shaped thorax vs dogs with deep thorax, 1097

GROWTH
Use of orthopedic markers for quantitative determination of proximal radial and ulnar growth in foals, 1456
Changes in linear dimensions of the heart, relative to body weight, as measured by M-mode echocardiography in growing dogs, 1591

GROWTH, INTRACELLULAR
Effect of endocytic and metabolic inhibitors on the internalization and intracellular growth of *Brucella abortus* in Vero cells, 1658

GROWTH HORMONE
Developmental changes in the regulation of plasma growth hormone concentrations in Holstein calves, 1397
Growth hormone concentrations in plasma of healthy pigs and pigs with atrophic rhinitis, 1684

HALOTHANE
Comparison of the hemodynamic effects of halothane alone and halothane combined with epidurally administered morphine for anesthesia in ventilated dogs, 505
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
Dynamic baroreflex sensitivity in anesthetized horses, maintained at 1.25 to 1.3 minimal alveolar concentration of halothane, 1672

HAMSTERS
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189

HAPTOGLOBIN
Haptoglobin and ceruloplasmin as determinants of inflammation in dogs, 1738
HEART
Reversibility of furazolidone-induced cardiotoxicosis in ducklings, 1366
Early clinical and morphologic alterations in the pathogenesis of furazolidone-induced toxicosis in ducklings, 1531
Changes in linear dimensions of the heart, relative to body weight, as measured by M-mode echocardiography in growing dogs, 1591
HEART FAILURE, CONGESTIVE
Atrial natriuretic peptide concentration in dogs with congestive heart failure, chronic renal failure, and hyperadrenocorticism, 1831
HELMINTHS
Epizootiology of helminth parasitism in a beef cow/calf herd in Minnesota, 1712
HEMAGGLUTINATION ASSAY
Hemagglutination by psittacine beak and feather disease virus and use of hemagglutinatiion inhibition for detection of antibodies against the virus, 1810
HEMATOLOGY
Hematologic values of captive Mexican wolves, 1891
HEMIPLEGIA, LARYNGEAL
Treatment of left laryngeal hemiplegia in Standardbreds, using a nerve muscle pedicle graft, 1461
HEMODYNAMICS
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289
Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses, 1153
HEMOGLOBIN
Effect of repeated phlebotomy on iron status of rhesus monkeys (*Macaca mulatta*), 728
HEMOLYSIS
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
HEPARIN
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289
HERD HEALTH
Mass screening of cattle sera against 14 infectious disease agents, using an ELISA system for monitoring health in livestock, 1699
HERNIA, UMBILICAL
Evaluation of age, breed, and gender as risk factors for umbilical hernia in horses of a hospital population, 637
HERPESVIRUSES
Abortifacient property of bovine herpesvirus type 1 isolates that represent three subtypes determined by restriction endonuclease analysis of viral DNA, 458
Changes in phospholipids of alveolar lining material in calves after aerosol exposure to bovine herpesvirus-1 or parainfluenza-3 virus, 675
Determination of ability of a thymidine kinase-negative deletion mutant of bovine herpesvirus-1 to cause abortion in cattle, 1038
Location of open reading frame coding for equine herpesvirus type-1 glycoproteins with homology to gE and gI of herpes simplex virus, 1252
Efficacy of acyclovir against herpesvirus infection in Quaker parakeets, 2007
HETEROPHILS
Resistance of *Pasteurella multocida* A:3,4 to phagocytosis by turkey macrophages and heterophils, 1507
HISTAMINE
Effects of a histamine type-2 receptor antagonist (BMY-25368) on gastric secretion in horses, 108
HORSES
In vitro comparison of Thoroughbred and Standardbred racehorses with regard to local fatigue failure of the third metacarpal bone, 97
Composition and morphologic features of the interosseus muscle in Standardbreds and Thoroughbreds, 133
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Use of a computerized system for evaluation of equine spermatozoal motility, 224
Evaluation of progesterone deficiency as a cause of fetal death in mares with experimentally induced endotoxemia, 282
Uterine and fetal dynamics during early pregnancy in mares, 298
Use of newly developed assays for protein C and plasminogen in horses with signs of colic, 345
Mechanical and morphometric analysis of the third carpal bone of Thoroughbreds, 402
Tumor necrosis factor activity in the circulation of horses given endotoxin, 533
In vitro transport of cycloleucine by equine cecal mucosa, 539
Steady-state response characteristics of a pulse oximeter on equine intestine, 619
Isolation of a major form of pepsinogen from gastric mucosa of horses, 713
Proteoglycan synthesis and content in articular cartilage and cartilage repair tissue in horses, 1004
Concentrations of amino acids in the plasma of neonatal foals with septicemia, 1010
Effect of age on the concentrations of amino acids in the plasma of healthy foals, 1014
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses, 1153
Antigenic analysis of four species of the genus *Ehrlichia* by use of protein immunoblot, 1225
Characteristics of digital flexor tendon sheath fluid from clinically normal horses, 1292
Quantitative evaluation of the remodeling response of the proximal sesamoid bones to training-related stimuli in Thoroughbreds, 1350
Detection of chemotactic factors in preovulatory follicular fluid from mares, 1412
Use of orthopedic markers for quantitative determination of proximal radial and ulnar growth in foals, 1456
Microvascular circulation of the cecum in horses, 1545
Influence of polysulfated glycosaminoglycan on equine articular cartilage in explant culture, 1622
Dynamic baroreflex sensitivity in anesthetized horses, maintained at 1.25 to 1.3 minimal alveolar concentration of halothane, 1672
Effect of whole-body potassium depletion on plasma, erythrocyte, and middle gluteal muscle potassium concentration of healthy, adult horses, 1676
Detection of anti-equine neutrophil antibody by use of flow cytometry, 1883
Thermodilution estimation of cardiac output at high flows in anesthetized horses, 1893
Multivariable prediction model for the need for surgery in horses with colic, 1903
Comparison of high-performance liquid chromatography with a radiometric assay for determination of the effect of intra-articular administration of corticosteroid and saline solution on synovial fluid hyaluronate concentration in horses, 1940
An ultrasonographic off-set system for examination of equine tendons and ligaments, 1945
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
Isolation, characterization, and quantitative analysis of ceruloplasmin from horses, 1979
Effects of superoxide dismutase on injury induced by anoxia and reoxygenation in equine small intestine in vitro, 2050
Effects of the fungal endophyte *Acremonium coenophialum* in fescue on pregnant mares and foal viability, 2071
HORSES, DISEASES
Field evaluation of a commercial M-protein vaccine against *Streptococcus equi* infection in foals, 589
Osteochondrosis and juvenile spavin in equids, 607
Evaluation of age, breed, and gender as risk factors for umbilical hernia in horses of a hospital population, 637
Frequency and severity of osteochondrosis in horses with cervical stenotic myelopathy, 873
Serially determined plasma α-tocopherol concentrations and results of the oral vitamin E absorption test in clinically normal horses and in horses with degenerative myeloencephalopathy, 908
Evaluation of the oral vitamin E absorption test in horses, 912
In vitro responses of distal airways in horses with recurrent airway obstruction, 999
Actinobacillus suis-like organisms and evidence of hemolytic strains of *Actinobacillus lignieresii* in horses, 1245
Effect of diet on gentamicin-induced nephrotoxicosis in horses, 1274
Serum tumor necrosis factor activity in horses with colic attributable to gastrointestinal tract disease, 1565

HORSES, DRUGS AND TREATMENT
Effects of intra-articular administration of methylprednisolone acetate on normal equine cartilage, 83
Effects of a histamine type-2 receptor antagonist (BMY-25368) on gastric secretion in horses, 108
Effects of flunixin meglumine on endotoxin-induced prostaglandin $F_{2\alpha}$ secretion during early pregnancy in mares, 276
Morphologic study of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of glued periosteal autografts, 317
Correction: 636
Biochemical study of repair of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of periosteal autografts, 328
Evaluation of use of dimethyl sulfoxide for intra-articular lavage in clinically normal horses, 333
Influence of age on the disposition kinetics of chloramphenicol in equine neonates, 426
Influence of an ω-3 fatty acid-enriched ration on in vivo responses of horses to endotoxin, 523
Effect of dietary α-linolenic acid on endotoxin-induced production of tumor necrosis factor by peritoneal macrophages in horses, 528
Cardiovascular effects of xylazine and detomidine in horses, 651
Effect of administration of phenylbutazone or progesterone on recovery of embryos from the uterus of mares 5 days after ovulation, 678
Evaluation of intravenous administration of concentrated immunoglobulin G to colostrum-deprived foals, 709
Effects of sodium hyaluronate on tendon healing and adhesion formation in horses, 764
Effects of intra-articular administration of dimethylsulfoxide on chemically induced synovitis in immature horses, 934
Effects of exploratory laparatomy on plasma and peritoneal coagulation/fibrinolysis in horses, 1121
Effects of a proprietary topical medication on wound healing and collagen deposition in horses, 1128
Resistance of population-B equine strongyles to thiabendazole, oxfendazole, and phenothiazine (1981 to 1987), 1308
Effects of amnion and live yeast cell derivative on second-intention healing in horses, 1376
Treatment of left laryngeal hemiplegia in Standardbreds, using a nerve muscle pedicle graft, 1461
Effects of a highly concentrated hypertonic saline-dextran volume expander on cardiopulmonary function in anesthetized normovolemic horses, 1611
Use of nonimaging nuclear medicine techniques to assess the effect of flunixin meglumine on effective renal plasma flow and effective renal blood flow in healthy horses, 1619
Evaluation of epiglottic augmentation by use of polytetrafluoroethylene paste in horses, 1908
HUMAN BEINGS
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462
HUMIDITY
Effect of humidification on the airways of cats during high-frequency ventilation, 1474
HYALURONIC ACID
Comparison of high-performance liquid chromatography with a radiometric assay for determination of the effect of intra-articular administration of corticosteroid and saline solution on synovial fluid hyaluronate concentration in horses, 1940
HYPERLIPEMIA
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489
HYPERTENSION
Variance of indirect blood pressure measurements and prevalence of hypertension in clinically normal dogs, 561
HYPERTHERMIA
Effect of a passive heat and moisture exchanger on esophageal temperature in tumor-bearing dogs during whole-body hyperthermia, 1688
HYPERTROPHY, CARDIAC
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527
HYPOTHALAMUS
Effect of oral administration of prednisolone on thyroid function in dogs, 416
IMMUNE DEFICIENCY
Functional deficiency of polymorphonuclear leukocytes in simian acquired immunodeficiency syndrome, 1523
IMMUNE RESPONSE
Temporal relationships of viremia, interferon activity, and antibody responses of sheep infected with several bluetongue virus strains, 192
Lesions and localization of viral antigen in tissues of cattle with experimentally induced or naturally acquired mucosal disease, or with naturally acquired chronic bovine viral diarrhea, 269
Effect of ivermectin on the immune response in mice, 593
Isotype-specific antibody responses to bovine coronavirus structural proteins in serum, feces, and mucosal secretions from experimentally challenge-exposed colostrum-deprived calves, 692
Mucosal and systemic antibody responses to bovine coronavirus structural proteins in experimentally challenge-exposed calves fed low or high amounts of colostral antibodies, 700
Immunity in swine inoculated with larvae or extracts of a pig isolate and a sylvatic isolate of *Trichinella spiralis*, 754
Epidemiologic factors and isotype-specific antibody responses in serum and mucosal secretions of dairy calves with bovine coronavirus respiratory tract and enteric tract infections, 845
Mucosal and systemic isotype-specific antibody responses to bovine coronavirus structural proteins in naturally infected dairy calves, 852
Phagocytosis and erythrocyte antibody-rosette formation by three populations of mononuclear phagocytes obtained from dogs treated with glucocorticoids, 869
Serologic enzyme-linked immunosorbent assay responses of calves vaccinated with a killed *Mycobacterium paratuberculosis* vaccine, 1197
Comparison of four immune variables and pulmonary lesions of goats with intrapulmonary exposure and subsequent intrathoracic challenge exposure with *Pasteurella haemolytica*, 1214
Comparison of antibody response by use of synthetic adjuvant system and Freund complete adjuvant in rabbits, 1503
Antibody response to glycoprotein I in maternally immune pigs exposed to a mildly virulent strain of pseudorabies virus, 1788
IMMUNE SYSTEM
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
Effects of thromboxane synthetase inhibition on immune complex glomerulonephritis, 480
IMMUNIZATION, PASSIVE
Evaluation of intravenous administration of concentrated immunoglobulin G to colostrum-deprived foals, 709
IMMUNOBLOTTING
Characterization of eugonic fermenters group EF-4 by polyacrylamide gel electrophoresis and protein immunoblot analysis, 1065
IMMUNOGLOBULIN G
Evaluation of intravenous administration of concentrated immunoglobulin G to colostrum-deprived foals, 709
IMMUNOGLOBULINS
Quantitation of bovine immunoglobulins in culture fluids by use of sandwich radioimmunoassay with monoclonal antibodies, 243
Changes in serum immunoglobulin values in kittens after ingestion of colostrum, 393
IMMUNOHISTOCHEMISTRY
Immunocytochemical study of tissues from clinically normal dogs and of neoplasms, using keratin monoclonal antibodies, 613
INDOLE
Acute hemolytic anemia induced by oral administration of indole in ponies, 748
INDOMETHACIN
Kinetics of uptake and effects of topical indomethacin application on protein concentration in the aqueous humor of dogs, 1159
INFLAMMATION
Haptoglobin and ceruloplasmin as determinants of inflammation in dogs, 1738

Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747
INHIBITORS, CARBONIC ANHYDRASE
Evaluation of a topically administered carbonic anhydrase inhibitor (MK- 927) in normotensive and glaucomatous Beagles, 2067
INHIBITORS. ENDOCYTIC
Effect of endocytic and metabolic inhibitors on the internalization and intracellular growth of *Brucella abortus* in Vero cells, 1658
INHIBITORS, METABOLIC
Effect of endocytic and metabolic inhibitors on the internalization and intracellular growth of *Brucella abortus* in Vero cells, 1658
INSULIN
Serum glucose and insulin responses to an insulin-containing ophthalmic solution administered topically in clinically normal cats, 903
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
INTERFERON
Temporal relationships of viremia, interferon activity, and antibody responses of sheep infected with several bluetongue virus strains, 192
In vitro and in vivo 2',5'-oligoadenylate synthetase activity induced by recombinant DNA-derived bovine interferon αI1 in bovine alveolar macrophages and blood mononuclear cells, 1779
INTERFERON GAMMA, RECOMBINANT
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381
INTERLEUKIN 1
Secretion of interleukin-1 by bovine milk macrophages, 858
INTERLEUKIN 2
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381
Cytotoxicity against autologous, allogeneic, and xenogeneic tumor targets by human recombinant interleukin-2-activated lymphocytes from healthy dogs and dogs with lung tumors, 1132
Effects of human recombinant interleukin 2 on in vitro tumor cytotoxicity in dogs, 2029
INTESTINE
Intestinal responses to enterotoxigenic *Escherichia coli* heat-stable toxin b in non-porcine species, 734
INTRAOCULAR PRESSURE
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in dogs, 432
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in cats, 436
Effects of topical administration of 2.0% pilocarpine on intraocular pressure and pupil size in cats, 441
Correlation of morpholgic features of the iridocorneal angle to intraocular pressure in Samoyeds, 1875
Evaluation of two applanation tonometers in cats, 1917
INULIN
Exogenous creatinine clearance as a measure of glomerular filtration rate in dogs with reduced renal mass, 1029
IOHEXOL
Comparison of nonionic contrast agents iohexol and iotrolan for cisternal myelography in dogs, 926
IOTROLAN
Comparison of nonionic contrast agents iohexol and iotrolan for cisternal myelography in dogs, 926
IRIS
Correlation of morpholgic features of the iridocorneal angle to intraocular pressure in Samoyeds, 1875
IRON
Effect of repeated phlebotomy on iron status of rhesus monkeys (*Macaca mulatta*), 728
ISCHEMIA
Use of a nuclear imaging technique to detect gastric wall ischemia, 1089
ISOFLURANE
Quantitative electroencephalography in dogs anesthetized with 2.0% end-tidal concentration of isoflurane anesthesia, 551
Isospora suis
Ultrastructure of developing *Isospora suis* in cultured cells, 471
IVERMECTIN
Efficacy of ivermectin administered via sustained-release bolus against gastrointestinal nematodes in cattle, 62
Effect of ivermectin on the immune response in mice, 593
Efficacy of ivermectin chewable tablets and two new ivermectin tablet formulations against *Dirofilaria immitis* larvae in dogs, 1922
JOINTS
Effects of intra-articular administration of methylprednisolone acetate on normal equine articular cartilage, 83
Evaluation of use of dimethyl sulfoxide for intra-articular lavage in clinically normal horses, 333
Osteochondrosis and juvenile spavin in equids, 607
Effects of intra-articular administration of dimethylsulfoxide on chemically induced synovitis in immature horses, 934
KERATOMETRY
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781
KETAMINE
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
α-KETOISOCAPROATE
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
KIDNEY
Application of renal microangiography to normal and diseased kidneys of cattle and mice, 157
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
Comparison of four methods of estimating glomerular filtration rate in cats, 961
Correction: 1742
Exogenous creatinine clearance as a measure of glomerular filtration rate in dogs with reduced renal mass, 1029
Effect of diet on gentamicin-induced nephrotoxicosis in horses, 1274
Effect of dietary protein on functional, morphologic, and histologic changes of the kidney during compensatory renal growth in dogs, 1357
Use of nonimaging nuclear medicine techniques to assess the effect of flunixin meglumine on effective renal plasma flow and effective renal blood flow in healthy horses, 1619
Ultrasonographic examination of the right kidney in cows, 1938
Relationship between urine ammonium ion excretion and urine anion gap in dogs, 1956
KIDNEY FAILURE, CHRONIC
Atrial natriuretic peptide concentration in dogs with congestive heart failure, chronic renal failure, and hyperadrenocorticism, 1831
KINETICS, GLUCOSE
Comparison of methods to determine glucose kinetics and measurement of recycling and lactose formation in lactating cows, 1407
LACRIMAL GLAND
Lysozyme concentrations in the tears of cattle, goats, and sheep, 9
LACTATION
Comparison of methods to determine glucose kinetics and measurement of recycling and lactose formation in lactating cows, 1407
Changes in the bovine teat canal during the nonlactating period and early lactation, as measured by teat canal impressions, 2075

LACTOSE
Colonization control of lactose-fermenting *Salmonella typhimurium* in young broiler chickens by use of dietary lactose, 833
Comparison of methods to determine glucose kinetics and measurement of recycling and lactose formation in lactating cows, 1407
LARKSPUR
Description of a scale for rating the clinical response of cattle poisoned by larkspur, 488
LASERS
Acute effects of anti-inflammatory drugs on neodymium:yttrium aluminum garnet laser-induced uveitis in dogs, 1279
Effect of flurbiprofen on facility of aqueous outflow in the eyes of dogs, 1448
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452
LATENCY, VIRUS
Investigation of sites of pseudorabies virus latency, using polymerase chain reaction, 1799
Use of polymerase chain reaction to detect latent channel catfish virus, 1965
LAVAGE, BRONCHOALVEOLAR
Age-related changes in protein concentrations in serum and respiratory tract lavage fluid obtained from cats, 254
Changes in blood and bronchoalveolar lavage fluid components in calves with experimentally induced pneumonic pasteurellosis, 337
Cytologic, microbiologic, and biochemical analysis of bronchoalveolar lavage fluid obtained from 24 healthy cats, 1300
LAVAGE, INTRA-ARTICULAR
Evaluation of use of dimethyl sulfoxide for intra-articular lavage in clinically normal horses, 333
LENS IMPLANT
Use of biometry and keratometry for determining optimal power for intraocular lens implants in dogs, 781
LENTIVIRUSES
Risk factors associated with caprine arthritis-encephalitis virus infection in goats on California dairies, 510
Leptospira interrogans
Effect of vaccination with a monovalent *Leptospira interrogans* serovar hardjo type hardjo-bovis vaccine on type hardjo-bovis infection of cattle, 1639
Survey to estimate prevalence of *Leptospira interrogans* infection in mature cattle in the United States, 1761
Relationships between prevalence of *Leptospira interrogans* in cattle, and regional, climatic, and seasonal factors, 1766
LETTERS
Asks for complete strain identification, 643
Additions to article on preparation of skin flap for percutaneous absorption studies, 643
LEUCINE
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
LEUKOCYTES
Use of flow cytometry for determination of differential leukocyte counts in bovine blood, 630
Functional deficiency of polymorphonuclear leukocytes in simian acquired immunodeficiency syndrome, 1523
Modulation of function of bovine polymorphonuclear leukocytes and lymphocytes by high temperature in vitro and in vivo, 1692
LEUKOTOXIN
Lysis of bovine platelets by *Pasteurella haemolytica* leukotoxin, 453
LIGAMENTS
Evaluation of the instantaneous centers of rotation of the stifle before and after repair of torn cruciate ligament by use of the over-the-top technique in dogs, 1731
An ultrasonographic off-set system for examination of equine tendons and ligaments, 1945
α-LINOLENIC ACID
Effect of dietary α-linolenic acid on endotoxin-induced production of tumor necrosis factor by peritoneal macrophages in horses, 528
LIPOPOLYSACCHARIDES
Establishment of dose-response relationships in BALB/c mice, using *Brucella* cell surface protein and lipopolysaccharide, 261
Letter: 643
Vaccination of calves with a modified bacterin or oil-in-water emulsion containing alkali-detoxified *Salmonella typhimurium* lipopolysaccharide, 596
LIVER
Effect of left hepatic vein ligation on hepatic circulation, function, and microanatomy in dogs, 774
Hepatic ultrasonography and blood changes in cattle with experimentally induced hepatic abscesses, 803
LUNG DISEASES, OBSTRUCTIVE
In vitro responses of distal airways in horses with recurrent airway obstruction, 999
β-Adrenergic receptor activity in ponies with recurrent obstructive pulmonary disease, 1416
LUNGS
Comparison of inhalation-to-perfusion ratio in anesthetized dogs with barrel-shaped thorax vs dogs with deep thorax, 1097
Comparison of four immune variables and pulmonary lesions of goats with intrapulmonary exposure and subsequent intrathoracic challenge exposure with *Pasteurella haemolytica*, 1214
Pulmonary particle deposition and airway mucociliary clearance in cold- exposed calves, 1665
LUTEINIZING HORMONE
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423
LYMPH
Celiac trunk cannulation for obtaining abomasal lymph from cattle, 1117
LYMPH NODES
Measurement of estrogen receptors in normal and neoplastic lymph node tissue from dogs, 2055
LYMPHOCYTE FUNCTION
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
LYMPHOCYTES
In vitro and in vivo evaluation of effects of a heptanoyl tripeptide, FK-565, on porcine macrophage and lymphocyte function, 169
Inhibition of lymphocyte blastogenesis by whey, 247
Cytotoxicity against autologous, allogeneic, and xenogeneic tumor targets by human recombinant interleukin-2-activated lymphocytes from healthy dogs and dogs with lung tumors, 1132
Interactions of *Mycoplasma hyopneumoniae* membranes with porcine lymphocytes, 1497
Modulation of function of bovine polymorphonuclear leukocytes and lymphocytes by high temperature in vitro and in vivo, 1692
LYMPHOCYTES, CYTOTOXIC
Effects of human recombinant interleukin 2 on in vitro tumor cytotoxicity in dogs, 2029
LYMPHOID TISSUE
Morphologic characterization of conjunctiva-associated lymphoid tissue in chickens, 1852
MACROPHAGES
In vitro and in vivo evaluation of effects of a heptanoyl tripeptide, FK-565, on porcine macrophage and lymphocyte function, 169
Effect of dietary α-linolenic acid on endotoxin-induced production of tumor necrosis factor by peritoneal macrophages in horses, 528
Secretion of interleukin-1 by bovine milk macrophages, 858
Plasminogen activator production by bovine milk macrophages and blood monocytes, 1208
Resistance of *Pasteurella multocida* A:3,4 to phagocytosis by turkey macrophages and heterophils, 1507
In vitro and in vivo 2′,5′-oligoadenylate synthetase activity induced by recombinant DNA-derived bovine interferon αI1 in bovine alveolar macrophages and blood mononuclear cells, 1779
MAMMARY GLAND
Gram-negative bacterial infections of the mammary gland in cows, 184
Effects of postmilking teat treatment on the colonization of *Staphylococcus aureus* on chapped teat skin, 799
Effect of milk stasis on *Brucella abortus* infection of the mammary gland in goats, 886

Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046
Changes in the bovine teat canal during the nonlactating period and early lactation, as measured by teat canal impressions, 2075
MANAGEMENT PRACTICES
Association of environmental air contaminants with disease and productivity in swine, 1725
MASTITIS
Quantitative and qualitative properties of host polymorphonuclear cells during experimentally induced *Staphylococcus aureus* mastitis in cows, 474
Secretion of interleukin-1 by bovine milk macrophages, 858
N-acetyl-β-D-glucosaminidase as a predictor of milk loss and recovery after clinical mastitis, 1110
MEAT INSPECTION
Antibiotic and sulfonamide agents in bob veal calf muscle, liver, and kidney, 1383
MEMBRANE PROTEINS
Characterization and comparison of antimicrobial susceptibilities and outer membrane protein and plasmid DNA profiles of *Pasteurella haemolytica* and certain other members of the genus *Pasteurella*, 2016
METABOLIC ALKALOSIS
Replacement of chloride deficit by use of 1.8% NaCl to correct experimentally induced hypochloremic metabolic alkalosis in sheep, 1898
METABOLISM
Urine metabolite values in fed and nonfed clinically normal Beagles, 1573
METACARPUS
In vitro comparison of Thoroughbred and Standardbred racehorses with regard to local fatigue failure of the third metacarpal bone, 97
METHOTREXATE
Preclinical evaluation of L-asparaginase and methotrexate administered at intermediate doses, 1636
METHYLPREDNISOLONE
Effects of intra-articular administration of methylprednisolone acetate on normal equine articular cartilage, 83
METOCLOPRAMIDE
Evaluation of atropine, glucagon, and metoclopramide for facilitation of endoscopic intubation of the duodenum in dogs, 1948
MICE
Application of renal microangiography to normal and diseased kidneys of cattle and mice, 157
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Establishment of dose-response relationships in BALB/c mice, using *Brucella* cell surface protein and lipopolysaccharide, 261
Letter: 643
Effect of ivermectin on the immune response in mice, 593
Effects of gamma radiation and azathioprine on *Brucella abortus* infection in BALB/c mice, 838
Platelet aggregation, storage pool deficiency, and protein phosphorylation in mice with Chediak-Higashi syndrome, 945
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
MICROANGIOGRAPHY
Application of renal microangiography to normal and diseased kidneys of cattle and mice, 157
MIDAZOLAM
Effect of midazolam preanesthetic administration on thiamylal induction requirements in dogs, 662
MILBEMYCINS
Effects of milbemycin oxime on adult *Ancylostoma caninum* and *Uncinaria stenocephala* in dogs with experimentally induced infection, 64
Effect of milbemycin oxime against *Ancylostoma caninum* in dogs with naturally acquired infection, 951
Assessment of toxicosis induced by high-dose administration of milbemycin oxime in Collies, 1170
Chemoprophylactic effects of milbemycin oxime against larvae of *Dirofilaria immitus* during prepatent development, 2040
MILK
Secretion of interleukin-1 by bovine milk macrophages, 858
N-acetyl-β-D-glucosaminidase as a predictor of milk loss and recovery after clinical mastitis, 1110
Plasminogen activator production by bovine milk macrophages and blood monocytes, 1208
MILK PRODUCTION
Comparison of natural transmission of bovine leukemia virus in Holstein cows of two genetic lines selected for high and average milk production, 1551
MITOGENS
In vitro and in vivo evaluation of effects of a heptanoyl tripeptide, FK-565, on porcine macrophage and lymphocyte function, 169
MONKEYS
Effect of repeated phlebotomy on iron status of rhesus monkeys (*Macaca mulatta*), 728
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
MONOCLONAL ANTIBODIES
Immunohistologic examination of monoclonal antibodies generated against *Eimeria bovis* sporozoites for reactivity to meronts and sexual stages of *E bovis* and other eimerian parasites, 239
Quantitation of bovine immunoglobulins in culture fluids by use of sandwich radioimmunoassay with monoclonal antibodies, 243
Antigen expression in cultured oral keratinocytes from dogs, 445
Immunocytochemical study of tissues from clinically normal dogs and of neoplasms, using keratin monoclonal antibodies, 613
Identification of *Mycoplasma gallisepticum* by use of monoclonal antibody in a rapid slide agglutination test, 1602
MONOCYTES
Plasminogen activator production by bovine milk macrophages and blood monocytes, 1208
MONONUCLEAR CELLS
Phagocytosis and erythrocyte antibody-rosette formation by three populations of mononuclear phagocytes obtained from dogs treated with glucocorticoids, 869
In vitro and in vivo 2',5'-oligoadenylate synthetase activity induced by recombinant DNA-derived bovine interferon αI1 in bovine alveolar macrophages and blood mononuclear cells, 1779
MORPHINE
Comparison of the hemodynamic effects of halothane alone and halothane combined with epidurally administered morphine for anesthesia in ventilated dogs, 505
MUCOSAL DISEASE
Lesions and localization of viral antigen in tissues of cattle with experimentally induced or naturally acquired mucosal disease, or with naturally acquired chronic bovine viral diarrhea, 269
MUCOUS MEMBRANE
Antigen expression in cultured oral keratinocytes from dogs, 445
Muellerius capillaris
Efficacy of netobimin against *Muellerius capillaris* and resistant strain of digestive tract strongyles in dairy goats, 1313
MUSCULAR SYSTEM
In vitro characteristics of normal and dystrophic skeletal muscle from dogs, 104
Composition and morphologic features of the interosseus muscle in Standardbreds and Thoroughbreds, 133
Effects of divergent selection for limb weakness on bone and muscle cross-sectional areas in Duroc swine, 164
Effect of whole-body potassium depletion on plasma, erythrocyte, and middle gluteal muscle potassium concentration of healthy, adult horses, 1676
Mycobacterium paratuberculosis
Serologic enzyme-linked immunosorbent assay responses of calves vaccinated with a killed *Mycobacterium paratuberculosis* vaccine, 1197
Mycobacterium spp
Characterization by restriction endonuclease analysis and seroagglutination of strains of *Mycobacterium avium* and *Mycobacterium intracellulare* obtained from farmed deer, 197
Mycoplasma gallisepticum
Identification of *Mycoplasma gallisepticum* by use of monoclonal antibody in a rapid slide agglutination test, 1602
Mycoplasma hyopneumoniae
Interactions of *Mycoplasma hyopneumoniae* membranes with porcine lymphocytes, 1497
Mycoplasma spp
Bacterial and mycoplasmal flora of the healthy camelid conjunctival sac, 1061
MYELOGRAPHY
Comparison of nonionic contrast agents iohexol and iotrolan for cisternal myelography in dogs, 926
MYOCARDIUM
Effects of amiodarone on myocardial performance in normal canine hearts and canine hearts with infarcts, 891

Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527

NATRIURETIC PEPTIDES, ATRIAL
Atrial natriuretic peptide concentration in dogs with congestive heart failure, chronic renal failure, and hyperadrenocorticism, 1831

NEMATODES
Efficacy of ivermectin administered via sustained-release bolus against gastrointestinal nematodes in cattle, 62
Fecundity of gastrointestinal trichostrongylid nematodes of sheep in the field, 1182
Efficacy of netobimin against *Muellerius capillaris* and resistant strain of digestive tract strongyles in dairy goats, 1313

NEONATOLOGY
Use of adult dog serum as a substitute for colostrum in the neonatal dog, 1221

NEOPLASIA
Immunocytochemical study of tissues from clinically normal dogs and of neoplasms, using keratin monoclonal antibodies, 613
Association between solar radiation and ocular squamous cell carcinoma in cattle, 784
Cytotoxicity against autologous, allogeneic, and xenogeneic tumor targets by human recombinant interleukin-2-activated lymphocytes from healthy dogs and dogs with lung tumors, 1132
Effect of a passive heat and moisture exchanger on esophageal temperature in tumor-bearing dogs during whole-body hyperthermia, 1688
In vitro assay of nuclear uptake of doxorubicin hydrochloride in osteosarcoma cells of dogs, 1951
Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046
Measurement of estrogen receptors in normal and neoplastic lymph node tissue from dogs, 2055

NERVOUS SYSTEM
Pudendal reflexes and effects of conditioning stimuli in cats, 18
Comparison of genitoanal and bulbospongiosus reflexes and measurement of penile nerve conduction velocity in cats, 24
Measurement of anal and genitoanal reflexes in cats, 29

NETOBIMIN
Efficacy of netobimin against *Muellerius capillaris* and resistant strain of digestive tract strongyles in dairy goats, 1313

NEUTROPHIL FUNCTION
Defective function of leukocytes from cattle persistently infected with bovine viral diarrhea virus, and the influence of recombinant cytokines, 381

NEUTROPHILS
Changes in blood and bronchoalveolar lavage fluid components in calves with experimentally induced pneumonic pasteurellosis, 337
Pharmacologic enhancement or suppression of phagocytosis by bovine neutrophils, 363
Decreased respiratory burst activity in neonatal bovine neutrophils stimulated by protein kinase C agonists, 375
Analysis of selected variables in the under-agarose assay for chemotactic responses of canine neutrophils, 965
Flow cytometric study of oxidative burst activity in bovine neutrophils, 1201
Detection of anti-equine neutrophil antibody by use of flow cytometry, 1883
Heterogeneity in phagocytic and nitroblue tetrazolium reductive properties of neutrophils from cows, 2023

NITROBLUE TETRAZOLIUM
Heterogeneity in phagocytic and nitroblue tetrazolium reductive properties of neutrophils from cows, 2023

NITROSCANATE
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum*, *Dipylidium caninum*, and *Trichuris vulpis* in dogs, 574
Effects of nitroscanate on adult *Taenia pisiformis* in dogs with experimentally induced infections, 1542

NOCICEPTORS
Dose response of butorphanol administered subcutaneously to increase visceral nociceptive threshold in dogs, 1826

NORGESTREL
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423

NUCLEAR MEDICINE
Nuclear imaging of the stomach of healthy dogs, 1081
Use of a nuclear imaging technique to detect gastric wall ischemia, 1089
Use of nonimaging nuclear medicine techniques to assess the effect of flunixin meglumine on effective renal plasma flow and effective renal blood flow in healthy horses, 1619

OLIGONUCLEOTIDES
Detection of bovine viral diarrhea virus, using degenerate oligonucleotide primers and the polymerase chain reaction, 1231

OMEPRAZOLE
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658

ONCOGENES
Abnormal structure of the canine oncogene, related to the human c-*yes*-1 oncogene, in canine mammary tumor tissue, 2046

ORTHOPEDICS
Comparison of the width of the intervertebral disk space and radiographic changes before and after intervertebral disk fenestration in dogs, 140
Morphologic study of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of glued periosteal autografts, 317
Correction: 636
Biochemical study of repair of induced osteochondral defects of the distal portion of the radial carpal bone in horses by use of periosteal autografts, 328
Use of orthopedic markers for quantitative determination of proximal radial and ulnar growth in foals, 1456
Evaluation of plate luting, using an in vivo ovine osteotomy model, 1468
Evaluation of the instantaneous centers of rotation of the stifle before and after repair of torn cruciate ligament by use of the over-the-top technique in dogs, 1731

OSTEOCHONDROSIS
Osteochondrosis and juvenile spavin in equids, 607
Frequency and severity of osteochondrosis in horses with cervical stenotic myelopathy, 873

OSTEOTOMY
Evaluation of plate luting, using an in vivo ovine osteotomy model, 1468

Ostertagia ostertagi
Pathophysiologic effects of *Ostertagia ostertagi* in calves and their prevention by strategic anthelmintic treatments, 1706

OVARY
Detection of chemotactic factors in preovulatory follicular fluid from mares, 1412
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747

OVIDUCT
Atypical cilia in the oviductal epithelium of healthy prepubertal gilts, 101

OVINE PROGRESSIVE PNEUMONIA VIRUS
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189

OXFENDAZOLE
Resistance of population-B equine strongyles to thiabendazole, oxfendazole, and phenothiazine (1981 to 1987), 1308

OXIMETRY
Steady-state response characteristics of a pulse oximeter on equine intestine, 619

OXYGEN CONSUMPTION
Effects of conditioning and maximal incremental exercise on oxygen consumption in sheep, 1019

PACHYMETRY, ULTRASONIC
Canine corneal thickness measured by ultrasonic pachymetry, 1570
PARAGONIMIASIS
Evaluation of praziquantel for treatment of experimentally induced paragonimiasis in dogs and cats, 68
PARAINFLUENZA VIRUSES
Changes in phospholipids of alveolar lining material in calves after aerosol exposure to bovine herpesvirus-1 or parainfluenza-3 virus, 675
Replication of parainfluenza type-3 virus and bovine respiratory syncytial virus in isolated bovine type-II alveolar epithelial cells, 880
PARATHYROID GLAND
Functional analysis of ectopic parathyroid activity in cats, 1336
PARATHYROID HORMONE
Radioimmunoassay of parathyroid hormone in cats, 422
PARATUBERCULOSIS
Serodiagnosis of bovine paratuberculosis by use of a dot enzyme-linked immunosorbent assay, 217
Enzyme-linked immunosorbent assay for detection of antibodies against *Mycobacterium paratuberculosis* in goats, 863
Pasteurella haemolytica
Changes in blood and bronchoalveolar lavage fluid components in calves with experimentally induced pneumonic pasteurellosis, 337
Lysis of bovine platelets by *Pasteurella haemolytica* leukotoxin, 453
Comparison of four immune variables and pulmonary lesions of goats with intrapulmonary exposure and subsequent intrathoracic challenge exposure with *Pasteurella haemolytica*, 1214
Effect of *Pasteurella haemolytica* saline capsular extract on bovine pulmonary endothelial cells, 1774
Characterization and comparison of antimicrobial susceptibilities and outer membrane protein and plasmid DNA profiles of *Pasteurella haemolytica* and certain other members of the genus *Pasteurella*, 2016
Pasteurella multocida
Determination of affinity of *Pasteurella multocida* isolates for porcine respiratory tract mucus, and partial characterization of the receptors, 34
Induction of pneumonia in rabbits by use of a purified protein toxin from *Pasteurella multocida*, 56
Case-control study of fowl cholera outbreaks in meat turkeys in California from August 1985 through July 1986, 212
Correction: 639
Molecular epidemiology of *Pasteurella multocida* in turkeys, 1345
Resistance of *Pasteurella multocida* A:3,4 to phagocytosis by turkey macrophages and heterophils, 1507
Electrophoretic profiles of *Pasteurella multocida* isolates from animals with hemorrhagic septicemia, 1644
Resistance to antimicrobial agents and prevalence of R plasmids in *Pasteurella multocida* from swine, 1653
PEPSINOGEN
Isolation of a major form of pepsinogen from gastric mucosa of horses, 713
PERIPHERAL NERVES
Electrophysiologic studies of the cutaneous innervation of the pelvic limb of male dogs, 352
PERFUSION
Comparison of inhalation-to-perfusion ratio in anesthetized dogs with barrel-shaped thorax vs dogs with deep thorax, 1097
PHAGOCYTOSIS
Pharmacologic enhancement or suppression of phagocytosis by bovine neutrophils, 363
Phagocytosis and erythrocyte antibody-rosette formation by three populations of mononuclear phagocytes obtained from dogs treated with glucocorticoids, 869
Resistance of *Pasteurella multocida* A:3,4 to phagocytosis by turkey macrophages and heterophils, 1507
Heterogeneity in phagocytic and nitroblue tetrazolium reductive properties of neutrophils from cows, 2023
PHARMACOKINETICS
Influence of age on the disposition kinetics of chloramphenicol in equine neonates, 426
Comparative study of the pharmacokinetics of alfentanil in rabbits, sheep, and dogs, 581
Comparative studies on bioavailability and tissue uptake of two intraruminally or intraperitoneally administered esters of α-tocopherol in sheep, 640
Pharmacodynamic properties of succinylcholine in Greyhounds, 898
Kinetics of uptake and effects of topical indomethacin application on protein concentration in the aqueous humor of dogs, 1159
Respiratory tract distribution and bioavailability of spiramycin in calves, 1269
Kinetic study of serum gentamicin concentrations in baboons after single-dose administration, 1285
Pharmacokinetics and synovial fluid concentrations of cephapirin in calves with suppurative arthritis, 1438
Pharmacokinetics of rifampin in adult sheep, 1626
Pharmacokinetic properties of doxorubicin encapsulated in glutaraldehyde-treated canine erythrocytes, 1630
Effect of time of cisplatin administration on its toxicity and pharmacokinetics in dogs, 1821
Pharmacokinetic properties of enrofloxacin in rabbits, 1835
PHEASANTS
Identification and characterization of viral polypeptides from type-II avian adenoviruses, 1137
PHENOTHIAZINE
Resistance of population-B equine strongyles to thiabendazole, oxfendazole, and phenothiazine (1981 to 1987), 1308
PHENYLBUTAZONE
Effect of administration of phenylbutazone or progesterone on recovery of embryos from the uterus of mares 5 days after ovulation, 678
PHLEBOTOMY
Effect of repeated phlebotomy on iron status of rhesus monkeys (*Macaca mulatta*), 728
PHOSPHOLIPIDS
Changes in phospholipids of alveolar lining material in calves after aerosol exposure to bovine herpesvirus-1 or parainfluenza-3 virus, 675
PHOSPHONOFORMATE
Prophylactic and therapeutic effects of phosphonoformate against feline leukemia virus in vitro, 2010
PIGMENT, EPITHELIAL
Pigment epithelial function in canine retina, 1341
PILI
Diversity of pilin of serologically distinct *Bacteroides nodosus*, 202
Electron microscopic study of *Bacteroides nodosus* pili and associated structures, 206
PILOCARPINE
Effects of topical administration of 2.0% pilocarpine on intraocular pressure and pupil size in cats, 441
PINEAL GLAND
Granulopoiesis in the pineal gland of chickens, 449
PITUITARY GLAND, ANTERIOR
Effect of oral administration of prednisolone on thyroid function in dogs, 416
PLASMIDS
Transformation of *Corynebacterium pseudotuberculosis* by electroporation, 1258
Comparative study of colonizing and noncolonizing *Campylobacter jejuni*, 1518
Resistance to antimicrobial agents and prevalence of R plasmids in *Pasteurella multocida* from swine, 1653
Characterization and classification of *Actinobacillus (Haemophilus) pleuropneumoniae* plasmids, 1816
Characterization and comparison of antimicrobial susceptibilities and outer membrane protein and plasmid DNA profiles of *Pasteurella haemolytica* and certain other members of the genus *Pasteurella*, 2016
PLASMINOGEN
Use of newly developed assays for protein C and plasminogen in horses with signs of colic, 345
Plasminogen activator production by bovine milk macrophages and blood monocytes, 1208
PLATELETS
von Willebrand factor in lysates of washed canine platelets, 119
Lysis of bovine platelets by *Pasteurella haemolytica* leukotoxin, 453
Platelet aggregation, storage pool deficiency, and protein phosphorylation in mice with Chediak-Higashi syndrome, 945
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986
PNEUMONIA
Induction of pneumonia in rabbits by use of a purified protein toxin from *Pasteurella multocida*, 56

POLIOENCEPHALOMALACIA
Clinical and biochemical alterations in calves with nutritionally induced polioencephalomalacia (Pub December 1990, p 1969) Correction: 514
High sulfide concentrations in rumen fluid associated with nutritionally induced polioencephalomalacia in calves, 1164
POLYMERASE CHAIN REACTION
Detection of bovine viral diarrhea virus, using degenerate oligonucleotide primers and the polymerase chain reaction, 1231
Investigation of sites of pseudorabies virus latency, using polymerase chain reaction, 1799
Use of polymerase chain reaction to detect latent channel catfish virus, 1965
POLYMORPHONUCLEAR CELLS
Quantitative and qualitative properties of host polymorphonuclear cells during experimentally induced *Staphylococcus aureus* mastitis in cows, 474
POLYPEPTIDES, VIRAL
Identification and characterization of viral polypeptides from type-II avian adenoviruses, 1137
POLYTETRAFLUOROETHYLENE
Evaluation of epiglottic augmentation by use of polytetrafluoroethylene paste in horses, 1908
PONIES
Evaluation of sodium carboxymethylcellulose for prevention of experimentally induced abdominal adhesions in ponies, 88
Effects of heparin treatment on colonic torsion-associated hemodynamic and plasma eicosanoid changes in anesthetized ponies, 289
Ototoxic potential of gentamicin in ponies, 494
Controlled test evaluation of the benzimidazole anthelmintic VET 220-S alone or with concomitant trichlorfon treatment against naturally acquired gastrointestinal parasites in ponies, 566
Acute hemolytic anemia after oral administration of L-tryptophan in ponies, 742
Acute hemolytic anemia induced by oral administration of indole in ponies, 748
β-Adrenergic receptor activity in ponies with recurrent obstructive pulmonary disease, 1416
PORCINE EPIDEMIC DIARRHEA VIRUS
Use of two enzyme-linked immunosorbent assays to monitor antibody responses in swine with experimentally induced infection with porcine epidemic diarrhea virus, 1044
POTASSIUM
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
Effect of whole-body potassium depletion on plasma, erythrocyte, and middle gluteal muscle potassium concentration of healthy, adult horses, 1676
POTENTIOMETRY
Postnatal development of the visual-evoked potential in dogs, 231
Postnatal development of the brain stem auditory-evoked potential in dogs, 410
PRAZIQUANTEL
Evaluation of praziquantel for treatment of experimentally induced paragonimiasis in dogs and cats, 68
PREDNISOLONE
Effect of oral administration of prednisolone on thyroid function in dogs, 416
PREGNANCY
Effects of flunixin meglumine on endotoxin-induced prostaglandin $F_{2\alpha}$ secretion during early pregnancy in mares, 276
Uterine and fetal dynamics during early pregnancy in mares, 298
Effects of the fungal endophyte *Acremonium coenophialum* in fescue on pregnant mares and foal viability, 2071
PRESSORECEPTORS
Dynamic baroreflex sensitivity in anesthetized horses, maintained at 1.25 to 1.3 minimal alveolar concentration of halothane, 1672
PROGESTERONE
Evaluation of progesterone deficiency as a cause of fetal death in mares with experimentally induced endotoxemia, 282
Effect of administration of phenylbutazone or progesterone on recovery of embryos from the uterus of mares 5 days after ovulation, 678
Luteinizing hormone and progesterone concentrations and induction of estrus after use of norgestomet ear implants or constant infusion of gonadotropin-releasing hormone in anestrous nonlactating dairy goats, 1423
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747
Evaluation of use of progesterone to counteract zearalenone toxicosis during early pregnancy in gilts, 1871
PROLACTIN
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747
PROPIONATES
Effect of flurbiprofen on facility of aqueous outflow in the eyes of dogs, 1448
Comparison of flunixin meglumine and flurbiprofen for control of ocular irritative response in dogs, 1452
PROPRANOLOL
Effects of mechanical and pharmacologic manipulations on portal pressure, central venous pressure, and heart rate in dogs, 1327
PROSTATE
Effects of bacterial infection and castration on prostatic tissue zinc concentration in dogs, 1262
PROTEIN C
Use of newly developed assays for protein C and plasminogen in horses with signs of colic, 345
PROTEIN KINASE C
Decreased respiratory burst activity in neonatal bovine neutrophils stimulated by protein kinase C agonists, 375
PROTEINS
Characterization of proteins in sporulated and unsporulated *Eimeria maxima* oocysts, 72
Age-related changes in protein concentrations in serum and respiratory tract lavage fluid obtained from cats, 254
Establishment of dose-response relationships in BALB/c mice, using *Brucella* cell surface protein and lipopolysaccharide, 261 Letter: 643
Effect of dietary protein on functional, morphologic, and histologic changes of the kidney during compensatory renal growth in dogs, 1357
PROTEOGLYCANS
Proteoglycan synthesis and content in articular cartilage and cartilage repair tissue in horses, 1004
PROTO-ONCOGENES
Proto-oncogenes of genomic DNA in clinically normal animals of various species, 940
PSEUDORABIES VIRUS
Recombination of pseudorabies virus vaccine strains in swine, 820 Correction: 1559
Efficacy of a pseudorabies virus vaccine based on deletion mutant strain 783 that does not express thymidine kinase and glycoprotein I, 1056
Antibody response to glycoprotein I in maternally immune pigs exposed to a mildly virulent strain of pseudorabies virus, 1788
Investigation of sites of pseudorabies virus latency, using polymerase chain reaction, 1799
PSITTACINE BEAK AND FEATHER DISEASE
Routes and prevalence of shedding of psittacine beak and feather disease virus, 1804
Hemagglutination by psittacine beak and feather disease virus and use of hemagglutinatiion inhibition for detection of antibodies against the virus, 1810
PUDENDAL NERVE
Pudendal reflexes and effects of conditioning stimuli in cats, 18
PUPIL
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in dogs, 432
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in cats, 436
Effects of topical administration of 2.0% pilocarpine on intraocular pressure and pupil size in cats, 441
PYODERMA
Prophylactic effect of four antibacterial shampoos against *Staphylococcus intermedius* in dogs, 115
PYRROLIZIDINE
Toxicity of pyrrolizidine alkaloids from Riddell groundsel (*Senecio riddellii*) to cattle, 146

RABBITS
Induction of pneumonia in rabbits by use of a purified protein toxin from *Pasteurella multocida*, 56
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Comparative study of the pharmacokinetics of alfentanil in rabbits, sheep, and dogs, 581
Comparison of several combinations for anesthesia in rabbits, 669
Comparison of antibody response by use of synthetic adjuvant system and Freund complete adjuvant in rabbits, 1503
Pharmacokinetic properties of enrofloxacin in rabbits, 1835
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
RACING
Quantitative evaluation of the remodeling response of the proximal sesamoid bones to training-related stimuli in Thoroughbreds, 1350
RADIATION, GAMMA
Effects of gamma radiation and azathioprine on *Brucella abortus* infection in BALB/c mice, 838
RADIATION, SOLAR
Association between solar radiation and ocular squamous cell carcinoma in cattle, 784
RADIOGRAPHY
Osteochondrosis and juvenile spavin in equids, 607
RADIOIMMUNOASSAY
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489
RADIUS
Use of orthopedic markers for quantitative determination of proximal radial and ulnar growth in foals, 1456
RATS
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
RECEPTORS, β-ADRENERGIC
β-Adrenergic receptor activity in ponies with recurrent obstructive pulmonary disease, 1416
RECEPTORS, ESTROGEN
Measurement of estrogen receptors in normal and neoplastic lymph node tissue from dogs, 2055
RECEPTORS, INSULIN
Erythrocyte insulin receptors in dogs with spontaneous hyperadrenocorticism, 917
REFLEXES, GENITOANAL
Comparison of genitoanal and bulbospongious reflexes and measurement of penile nerve conduction velocity in cats, 24
Measurment of anal and genitoanal reflexes in cats, 29
RENAL FAILURE
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
RENAL FUNCTION
Quantitative urinalysis in kittens from four to thirty weeks after birth, 1295
RENAL FUNCTION TESTS
Renal clearance and fractional excretion of electrolytes over four 6-hour periods in cattle, 5
REPRODUCTION
Effect of stage of gestation on efficacy of *Brucella abortus* strain-19 vaccination in cattle, 1848
RESIDUES, MILK
Effects on aflatoxin M_1 residues in milk by addition of hydrated sodium calcium aluminosilicate to aflatoxin-contaminated diets of dairy cows, 1556
RESPIRATORY FUNCTION
Effects of conditioning and maximal incremental exercise on oxygen consumption in sheep, 1019
RESPIRATORY SYSTEM
Determination of affinity of *Pasteurella multocida* isolates for porcine respiratory tract mucus, and partial characterization of the receptors, 34
Age-related changes in protein concentrations in serum and respiratory tract lavage fluid obtained from cats, 254
Changes in blood and bronchoalveolar lavage fluid components in calves with experimentally induced pneumonic pasteurellosis, 337
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576
In vitro responses of distal airways in horses with recurrent airway obstruction, 999
Evaluation of carbohydrate malassimilation and intestinal transit time in cats by measurement of breath hydrogen excretion, 1104
Respiratory tract distribution and bioavailability of spiramycin in calves, 1269
Effects of bovine respiratory syncytial virus on airway function in neonatal calves, 1401
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Treatment of left laryngeal hemiplegia in Standardbreds, using a nerve muscle pedicle graft, 1461
Effect of humidification on the airways of cats during high-frequency ventilation, 1474
Static thoracic compliance as a measurement of pulmonary function in dogs, 1597
In vitro and in vivo 2′,5′-oligoadenylate synthetase activity induced by recombinant DNA-derived bovine interferon αI1 in bovine alveolar macrophages and blood mononuclear cells, 1779
RETICULOCYTE ENUMERATION
Evaluation of flow cytometric counting procedure for canine reticulocytes by use of thiazole orange, 723
RETICULUM
Evaluation of multiple reticulorumen selenium pellets as a health risk in growing Hereford steers, 1866
RETINA
Pigment epithelial function in canine retina, 1341
RHESUS MACAQUES
Functional deficiency of polymorphonuclear leukocytes in simian acquired immunodeficiency syndrome, 1523
Rhipicephalus sanguineous
Evaluation of *Rhipicephalus sanguineus* as a potential biologic vector of *Ehrlichia platys*, 1537
RIFAMPIN
Pharmacokinetics of rifampin in adult sheep, 1626
RIFT VALLEY FEVER VIRUS
Ability of a mutagenized virus variant to protect young lambs from Rift Valley fever, 50
RNA BLOTTING
Evidence of genome segment 5 reassortment in bluetongue virus field isolates, 1794
RUMEN
High sulfide concentrations in rumen fluid associated with nutritionally induced polioencephalomalacia in calves, 1164
Antagonistic effect of atipamezole on xylazine-induced sedation, bradycardia, and ruminal atony in calves, 1265
Pathologic changes, tissue distribution, and extent of conversion to ethylenethiourea after subacute administration of zinc ethylenebis-dithiocarbamate (zineb) to calves with immature rumen function, 1717
Evaluation of multiple reticulorumen selenium pellets as a health risk in growing Hereford steers, 1866
SALINE
Hypertonic saline/dextran resuscitation of dogs with experimentally induced gastric dilatation-volvulus shock, 92
Hemodynamic response of endotoxemic calves to treatment with small-volume hypertonic saline solution, 981
Respiratory, renal, hematologic, and serum biochemical effects of hypertonic saline solution in endotoxemic calves, 990
Effects of a highly concentrated hypertonic saline-dextran volume expander on cardiopulmonary function in anesthetized normovolemic horses, 1611
Replacement of chloride deficit by use of 1.8% NaCl to correct experimentally induced hypochloremic metabolic alkalosis in sheep, 1898
Comparison of high-performance liquid chromatography with a radiometric assay for determination of the effect of intra-articular administration of corticosteroid and saline solution on synovial fluid hyaluronate concentration in horses, 1940

Salmonella enteritidis
Enzyme-linked immunosorbent assay for the detection of *Salmonella enteritidis* infection in chickens, 1069
Salmonella newport
Experimental establishment of persistent infection in swine with a zoonotic strain of *Salmonella newport*, 813
Salmonella spp
Comparison of phenotypic characteristics of *Salmonella* spp isolated from healthy and ill (infected) chickens, 1512
Salmonella typhimurium
Vaccination of calves with a modified bacterin or oil-in-water emulsion containing alkali-detoxified *Salmonella typhimurium* lipopolysaccharide, 596
Colonization control of lactose-fermenting *Salmonella typhimurium* in young broiler chickens by use of dietary lactose, 833
Resistance to fecal shedding of salmonellae in pigs and chickens vaccinated with an aromatic-dependent mutant of *Salmonella typhimurium*, 1784
SEDATION
Influence of sedative and anesthetic agents on intradermal skin test reactions in dogs, 1484
SELENIUM
Evaluation of multiple reticulorumen selenium pellets as a health risk in growing Hereford steers, 1866
SEMEN
Effect of method of seminal collection on the retrograde flow of spermatozoa into the urinary bladder of rams, 307
Correction: 788
Senecio spp
Toxicity of pyrolizidine alkaloids from Riddell groundsel (*Senecio riddellii*) to cattle, 146
Serum liver enzyme and histopathologic changes in calves with chronic and chronic-delayed *Senecio jacobaea* toxicosis, 1969
SEPTICEMIA
Concentrations of amino acids in the plasma of neonatal foals with septicemia, 1010
SERODIAGNOSIS
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Characterization by restriction endonuclease analysis and seroagglutination of strains of *Mycobacterium avium* and *Mycobacterium intracellulare* obtained from farmed deer, 197
Serodiagnosis of bovine paratuberculosis by use of a dot enzyme-linked immunosorbent assay, 217
Evaluation of an indirect enzyme-linked immunosorbent assay for screening antibody against aflatoxins, 222
Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462
Serologic and blood culture survey of *Trypanosoma cruzi* infection in four canine populations of southern Louisiana, 570
Enzyme-linked immunosorbent assay for detection of antibodies against *Mycobacterium paratuberculosis* in goats, 863
Serologic detection and practical consequences of antigenic diversity among bovine viral diarrhea viruses in a vaccinated herd, 1033
Use of two enzyme-linked immunosorbent assays to monitor antibody responses in swine with experimentally induced infection with porcine epidemic diarrhea virus, 1044
Enzyme-linked immunosorbent assay for the detection of *Salmonella enteritidis* infection in chickens, 1069
Mass screening of cattle sera against 14 infectious disease agents, using an ELISA system for monitoring health in livestock, 1699
Survey to estimate prevalence of *Leptospira interrogans* infection in mature cattle in the United States, 1761
Relationships between prevalence of *Leptospira interrogans* in cattle, and regional, climatic, and seasonal factors, 1766
Hemagglutination by psittacine beak and feather disease virus and use of hemagglutinatiion inhibition for detection of antibodies against the virus, 1810
SESAMOID BONES
Quantitative evaluation of the remodeling response of the proximal sesamoid bones to training-related stimuli in Thoroughbreds, 1350
SHAMPOOS
Prophylactic efficacy of four antibacterial shampoos against *Staphylococcus intermedius* intermedius in dogs, 115
SHEEP
Lysozyme concentrations in the tears of cattle, goats, and sheep, 9
Ability of a mutagenized virus variant to protect young lambs from Rift Valley fever, 50
Diminution of aflatoxin toxicity to growing lambs by dietary supplementation with hydrated sodium calcium aluminosilicate, 152
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Temporal relationships of viremia, interferon activity, and antibody responses of sheep infected with several bluetongue virus strains, 192
Effect of method of seminal collection on the retrograde flow of spermatozoa into the urinary bladder of rams, 307
Correction: 788
Effects of α-ketoisocaproate on adrenocorticotropin-induced suppression of lymphocyte function in sheep, 388
Comparative study of the pharmacokinetics of alfentanil in rabbits, sheep, and dogs, 581
Comparative studies on bioavailability and tissue uptake of two intraruminally or intraperitoneally administered esters of α-tocopherol in sheep, 640
Effects of conditioning and maximal incremental exercise on oxygen consumption in sheep, 1019
Differences in signs and lesions in sheep and goats with enterotoxemia induced by intraduodenal infusion of *Clostridium perfringens* type D, 1147
Fecundity of gastrointestinal trichostrongylid nematodes of sheep in the field, 1182
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Evaluation of plate luting, using an in vivo ovine osteotomy model, 1468
Pharmacokinetics of rifampin in adult sheep, 1626
Replacement of chloride deficit by use of 1.8% NaCl to correct experimentally induced hypochloremic metabolic alkalosis in sheep, 1898
Prevalence of pigment gallstones in sheep, 2043
SHOCK
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576
SIMIAN ACQUIRED IMMUNE DEFICIENCY SYNDROME
Functional deficiency of polymorphonuclear leukocytes in simian acquired immunodeficiency syndrome, 1523
SKIN
Development of surgical techniques for preparation of in vitro-isolated perfused porcine skin flaps for percutaneous absorption studies, 75
Letter: 643
Fungal flora of the coat of pet cats, 602
SKIN GRAFTS
Axial pattern flap based on the caudal auricular artery in dogs, 922
SKIN TESTING
Influence of sedative and anesthetic agents on intradermal skin test reactions in dogs, 1484
SMALL INTESTINE
Culture and morphologic features of small intestinal mucosal explants from weaned pigs, 1142
Effects of diet on acidic and neutral goblet cell populations in the small intestine of early weaned pigs, 1743
Effects of superoxide dismutase on injury induced by anoxia and reoxygenation in equine small intestine in vitro, 2050
SODIUM
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
SODIUM BICARBONATE
Effect of sodium bicarbonate infusion on serum osmolality, electrolyte concentrations, and blood gas tensions in cats, 12
SODIUM HYALURONATE
Effects of sodium hyaluronate on tendon healing and adhesion formation in horses, 764
SODIUM TRANSPORT
Erythrocyte cation content and sodium transport in Siberian Huskies, 1427
SPERMATOZOA
Use of a computerized system for evaluation of equine spermatozoal motility, 224
Effect of method of seminal collection on the retrograde flow of sper-

matozoa into the urinary bladder of rams, 307
Correction: 788
Retrograde flow of spermatozoa into the urinary bladder of cats during electroejaculation, collection of semen with an artificial vagina, and mating, 687
SPINAL CORD
Comparison of the width of the intervertebral disk space and radiographic changes before and after intervertebral disk fenestration in dogs, 140
SPIRAMYCIN
Respiratory tract distribution and bioavailability of spiramycin in calves, 1269
Staphylococcus aureus
Quantitative and qualitative properties of host polymorphonuclear cells during experimentally induced *Staphylococcus aureus* mastitis in cows, 474
Effects of postmilking teat treatment on the colonization of *Staphylococcus aureus* on chapped teat skin, 799
Staphylococcus intermedius
Prophylactic efficacy of four antibacterial shampoos against *Staphylococcus intermedius* in dogs, 115
STIFLE
Evaluation of the instantaneous centers of rotation of the stifle before and after repair of torn cruciate ligament by use of the over-the-top technique in dogs, 1731
STOMACH
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658
Isolation of a major form of pepsinogen from gastric mucosa of horses, 713
Nuclear imaging of the stomach of healthy dogs, 1081
Use of a nuclear imaging technique to detect gastric wall ischemia, 1089
STORAGE, SAMPLE
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Streptococcus equi
Field evaluation of a commercial M-protein vaccine against *Streptococcus equi* infection in foals, 589
Streptococcus faecalis
Use of corticosterone and ampicillin for treatment of *Streptococcus faecalis* infection in chickens, 1288
STRESS
Market stress-associated changes in serum complement activity in feeder calves, 1842
STRESS, HEAT
Modulation of function of bovine polymorphonuclear leukocytes and lymphocytes by high temperature in vitro and in vivo, 1692
STRONGYLES
Resistance of population-B equine strongyles to thiabendazole, oxfendazole, and phenothiazine (1981 to 1987), 1308
SUCCINYLCHOLINE
Pharmacodynamic properties of succinylcholine in Greyhounds, 898
SULFIDES
High sulfide concentrations in rumen fluid associated with nutritionally induced polioencephalomalacia in calves, 1164
SULFONAMIDES
Antibiotic and sulfonamide agents in bob veal calf muscle, liver, and kidney, 1383
SUPEROXIDE DISMUTASE
Effects of superoxide dismutase on injury induced by anoxia and reoxygenation in equine small intestine in vitro, 2050
SURGERY
Effects of exploratory laparatomy on plasma and peritoneal coagulation/fibrinolysis in horses, 1121
Multivariable prediction model for the need for surgery in horses with colic, 1903
SUSTAINED-RELEASE BOLUS
Efficacy of ivermectin administered via sustained-release bolus against gastric nematodes in cattle, 62
SWINE
Development of surgical techniques for preparation of in vitro-isolated perfused porcine skin flaps for percutaneous absorption studies, 75
Letter: 643
Atypical cilia in the oviductal epithelium of healthy prepubertal gilts, 101
Effects of divergent selection for limb weakness on bone and muscle cross-sectional areas in Duroc swine, 164
In vitro and in vivo evaluation of effects of a heptanoyl tripeptide, FK-565, on porcine macrophage and lymphocyte function, 169
Seroprevalence of ovine progressive pneumonia virus in various domestic and wild animal species, and species susceptibilty to the virus, 189
Culture and morphologic features of small intestinal mucosal explants from weaned pigs, 1142
Association of environmental air contaminants with disease and productivity in swine, 1725
Effects of diet on acidic and neutral goblet cell populations in the small intestine of early weaned pigs, 1743
Cutaneous laser-Doppler velocimetry in nine animal species, 1960
SWINE, DISEASES
Determination of affinity of *Pasteurella multocida* isolates for porcine respiratory tract mucus, and partial characterization of the receptors, 34
Susceptibility of Chinese Meishan and European Large White pigs to enterotoxigenic *Escherichia coli* strains bearing colonization factor K88, 987P, K99, or F41, 40
Relationship between virulence and adherence of various enterotoxigenic *Escherichia coli* strains to isolated intestinal epithelial cells from Chinese Meishan and European Large White pigs, 45
Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462
Immunity in swine inoculated with larvae or extracts of a pig isolate and a sylvatic isolate of *Trichinella spiralis*, 754
Use of embryonating eggs for isolation of *Campylobacter* species from intestines of swine with proliferative enteritis, 810
Experimental establishment of persistent infection in swine with a zoonotic strain of *Salmonella newport*, 813
Recombination of pseudorabies virus vaccine strains in swine, 820
Correction: 1559
Use of two enzyme-linked immunosorbent assays to monitor antibody responses in swine with experimentally induced infection with porcine epidemic diarrhea virus, 1044
Evaluation of a live avirulent *Escherichia coli* vaccine for K88$^+$, LT$^+$ enterotoxigenic colibacillosis in weaned pigs, 1051
Efficacy of a pseudorabies virus vaccine based on deletion mutant strain 783 that does not express thymidine kinase and glycoprotein I, 1056
Protective immunity to toxoplasmosis in pigs vaccinated with a nonpersistent strain of *Toxoplasma gondii*, 1316
Interactions of *Mycoplasma hyopneumoniae* membranes with porcine lymphocytes, 1497
Characterization of encephalomyocarditis virus isolated from aborted swine fetuses, 1649
Resistance to antimicrobial agents and prevalence of R plasmids in *Pasteurella multocida* from swine, 1653
Growth hormone concentrations in plasma of healthy pigs and pigs with atrophic rhinitis, 1684
Resistance to fecal shedding of salmonellae in pigs and chickens vaccinated with an aromatic-dependent mutant of *Salmonella typhimurium*, 1784
SWINE, DRUGS AND TREATMENT
Antibody response to glycoprotein I in maternally immune pigs exposed to a mildly virulent strain of pseudorabies virus, 1788
Evaluation of use of progesterone to counteract zearalenone toxicosis during early pregnancy in gilts, 1871
SYNOVIAL FLUID
Pharmacokinetics and synovial fluid concentrations of cephapirin in calves with suppurative arthritis, 1438
Comparison of high-performance liquid chromatography with a radiometric assay for determination of the effect of intra-articular administration of corticosteroid and saline solution on synovial fluid hyaluronate concentration in horses, 1940

Taenia pisiformis
Effects of nitroscanate on adult *Taenia pisiformis* in dogs with experimentally induced infections, 1542

Taenia spp
Development of a serologic assay for cysticercosis, using an antigen isolated from *Taenia* spp cyst fluid, 462
TEETH
Potential attachment area of the fourth maxillary premolar in dogs, 626
TENDONS
Effects of sodium hyaluronate on tendon healing and adhesion formation in horses, 764
Characteristics of digital flexor tendon sheath fluid from clinically normal horses, 1292
An ultrasonographic off-set system for examination of equine tendons and ligaments, 1945
TESTOSTERONE
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489
THERMODILUTION
Thermodilution estimation of cardiac output at high flows in anesthetized horses, 1893
THIACETARSAMIDE
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986
THIAMINE
Evaluation of edetate and thiamine for treatment of experimentally induced environmental lead poisoning in cattle, 1860
THIAMYLAL
Effect of midazolam preanesthetic administration on thiamylal induction requirements in dogs, 662
THIOCARBAMATES
Pathologic changes, tissue distribution, and extent of conversion to ethylenethiourea after subacute administration of zinc ethylenebis-dithiocarbamate (zineb) to calves with immature rumen function, 1717
THIOPENTAL
Cardiovascular and respiratory effects of thiopental administration in hypovolemic dogs, 576
THROMBIN
Platelet function, antithrombin-III activity, and fibrinogen concentration in heartworm-infected and heartworm-negative dogs treated with thiacetarsamide, 1986
THROMBOXANE SYNTHETASE
Effects of thromboxane synthetase inhibition on immune complex glomerulonephritis, 480
THYROID GLAND
Effect of oral administration of prednisolone on thyroid function in dogs, 416
THYROXINE
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Effects of hyperlipemia on radioimmunoassays for progesterone, testosterone, thyroxine, and cortisol in serum and plasma samples from dogs, 1489
TICKS
Evaluation of *Rhipicephalus sanguineus* as a potential biologic vector of *Ehrlichia platys*, 1537
TICLOPIDINE
Effects of treatment with ticlopidine in heartworm-negative, heartworm-infected, and embolized heartworm-infected dogs, 2000
TILETAMINE
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Hemodynamic response of calves to tiletamine-zolazepam-xylazine anesthesia, 1606
TIMOLOL MALEATE
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in dogs, 432
Effects of topical administration of timolol maleate on intraocular pressure and pupil size in cats, 436
TISSUE CULTURE
Culture and morphologic features of small intestinal mucosal explants from weaned pigs, 1142
Influence of polysulfated glycosaminoglycan on equine articular cartilage in explant culture, 1622
α-TOCOPHEROL
Comparative studies on bioavailability and tissue uptake of two intraruminally or intraperitoneally administered esters of α-tocopherol in sheep, 640
Serially determined plasma α-tocopherol concentrations and results of the oral vitamin E absorption test in clinically normal horses and in horses with degenerative myeloencephalopathy, 908
TOLAZOLINE
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
TOLERANCE TEST, VITAMIN E
Evaluation of the oral vitamin E absorption test in horses, 912
TOMOGRAPHY, X-RAY COMPUTED
Multiplanar quantitative computed tomography for bone mineral analysis in dogs, 1479
TONOMETRY
Evaluation of two applanation tonometers in cats, 1917
TOROVIRUSES
Association of diarrhea in cattle with torovirus infections on farms, 1769
TOXICOSES
Toxicity of pyrrolizidine alkaloids from Riddell groundsel (*Senecio riddellii*) to cattle, 146
Diminution of aflatoxin toxicity to growing lambs by dietary supplementation with hydrated sodium calcium aluminosilicate, 152
Description of a scale for rating the clinical response of cattle poisoned by larkspur, 488
Ototoxic potential of gentamicin in ponies, 494
Assessment of toxicosis induced by high-dose administration of milbemycin oxime in Collies, 1170
Effect of diet on gentamicin-induced nephrotoxicosis in horses, 1274
Reversibility of furazolidone-induced cardiotoxicosis in ducklings, 1366
Early clinical and morphologic alterations in the pathogenesis of furazolidone-induced toxicosis in ducklings, 1531
Effect of time of cisplatin administration on its toxicity and pharmacokinetics in dogs, 1821
Evaluation of edetate and thiamine for treatment of experimentally induced environmental lead poisoning in cattle, 1860
Evaluation of use of progesterone to counteract zearalenone toxicosis during early pregnancy in gilts, 1871
Serum liver enzyme and histopathologic changes in calves with chronic and chronic-delayed *Senecio jacobaea* toxicosis, 1969
TOXOPLASMOSIS
Prospective vaccine prepared from a new mutant of *Toxoplasma gondii* for use in cats, 759
Protective immunity to toxoplasmosis in pigs vaccinated with a nonpersistent strain of *Toxoplasma gondii*, 1316
TRICHINOSIS
Immunity in swine inoculated with larvae or extracts of a pig isolate and a sylvatic isolate of *Trichinella spiralis*, 754
TRICHLORFON
Controlled test evaluation of the benzimidazole anthelmintic VET 220-S alone or with concomitant trichlorfon treatment against naturally acquired gastrointestinal parasites in ponies, 566
Trichuris vulpis
Efficacy of nitroscanate against naturally acquired infection with *Ancylostoma caninum*, *Dipylidium caninum*, and *Trichuris vulpis* in dogs, 574
Effect of milbemycin oxime against *Ancylostoma caninum* in dogs with naturally acquired infection, 951
TRIIODOTHYRONINE
Effects of hemolysis and storage on quantification of hormones in blood samples from dogs, cattle, and horses, 1075
Trypanosoma cruzi
Serologic and blood culture survey of *Trypanosoma cruzi* infection in four canine populations of southern Louisiana, 570
Clinical, clinicopathologic, and parasitologic observations of trypanosomiasis in dogs infected with North American *Trypanosoma cruzi* isolates, 954
Pathologic features of dogs inoculated with North American *Trypanosoma cruzi* isolates, 2033
TRYPTOPHAN
Acute hemolytic anemia after oral administration of L-tryptophan in ponies, 742
TUMOR NECROSIS FACTOR
Effect of dietary α-linolenic acid on endotoxin-induced production of tumor necrosis factor by peritoneal macrophages in horses, 528

Tumor necrosis factor activity in the circulation of horses given endotoxin, 533
Tumor necrosis factor as a potential mediator of acute metabolic and hormonal responses to endotoxemia in calves, 1320
Serum tumor necrosis factor activity in horses with colic attributable to gastrointestinal tract disease, 1565
TURKEYS
Case-control study of fowl cholera outbreaks in meat turkeys in California from August 1985 through July 1986, 212
Correction: 639
Identification and characterization of viral polypeptides from type-II avian adenoviruses, 1137
Molecular epidemiology of *Pasteurella multocida* in turkeys, 1345
Resistance of *Pasteurella multocida* A:3,4 to phagocytosis by turkey macrophages and heterophils, 1507
Effects of mild cardiac hypertrophy, induced by volume overload in turkeys, on myocardial sarcoplasmic reticulum calcium-pump and calcium-channel activities and on the creatine kinase system, 1527

ULCER, GASTRIC
Comparison of effects of cimetidine and omeprazole on mechanically created gastric ulceration and on aspirin-induced gastritis in dogs, 658
ULNA
Use of orthopedic markers for quantitative determination of proximal radial and ulnar growth in foals, 1456
ULTRASONOGRAPHY
Hepatic ultrasonography and blood changes in cattle with experimentally induced hepatic abscesses, 803
Ultrasonographic examination of the right kidney in cows, 1938
An ultrasonographic off-set system for examination of equine tendons and ligaments, 1945
ULTRASTRUCTURE
Ultrastructure of developing *Isospora suis* in cultured cells, 471
Uncinaria stenocephala
Effects of milbemycin oxime on adult *Ancylostoma caninum* and *Uncinaria stenocephala* in dogs with experimentally induced infections, 64
URETHRA
Use of fine-wire electrodes for electromyographic evaluation of the external urethral sphincter during urethral pressure profilometry in male cats, 314
URINALYSIS
Quantitative urinalysis in kittens from four to thirty weeks after birth, 1295
URINARY BLADDER
Effect of method of seminal collection on the retrograde flow of spermatozoa into the urinary bladder of rams, 307
Correction: 788
Retrograde flow of spermatozoa into the urinary bladder of cats during electroejaculation, collection of semen with an artificial vagina, and mating, 687
URINARY EXCRETION
Comparison of fractional excretion and 24-hour urinary excretion of sodium and potassium in clinically normal cats and cats with induced chronic renal failure, 718
UROLITHS
Prevalence of calcium oxalate uroliths in Miniature Schnauzers, 1579
Evaluation of urine and serum metabolites in Miniature Schnauzers with calcium oxalate urolithiasis, 1583
UTERUS
Uterine and fetal dynamics during early pregnancy in mares, 298
Effect of administration of phenylbutazone or progesterone on recovery of embryos from the uterus of mares 5 days after ovulation, 678
Histopathologic features, environmental factors, and serum estrogen, progesterone, and prolactin values associated with ovarian phase and inflammatory uterine disease in cats, 1747
UVEITIS
Acute effects of anti-inflammatory drugs on neodymium:yttrium aluminum garnet laser-induced uveitis in dogs, 1279

VACCINATION
Field evaluation of a commercial M-protein vaccine against *Streptococcus equi* infection in foals, 589
Vaccination of calves with a modified bacterin or oil-in-water emulsion containing alkali-detoxified *Salmonella typhimurium* lipopolysaccharide, 596
Prospective vaccine prepared from a new mutant of *Toxoplasma gondii* for use in cats, 759
Recombination of pseudorabies virus vaccine strains in swine, 820
Correction: 1559
Serologic detection and practical consequences of antigenic diversity among bovine viral diarrhea viruses in a vaccinated herd, 1033
Evaluation of a live avirulent *Escherichia coli* vaccine for K88$^+$, LT$^+$ enterotoxigenic colibacillosis in weaned pigs, 1051
Efficacy of a pseudorabies virus vaccine based on deletion mutant strain 783 that does not express thymidine kinase and glycoprotein I, 1056
Serologic enzyme-linked immunosorbent assay responses of calves vaccinated with a killed *Mycobacterium paratuberculosis* vaccine, 1197
Monitoring bovine viral diarrhea virus vaccines for adventitious virus, using T1 ribonuclease viral RNA oligonucleotide fingerprinting, 1237
Protective immunity to toxoplasmosis in pigs vaccinated with a nonpersistent strain of *Toxoplasma gondii*, 1316
Effect of vaccination with the R mutant *Escherichia coli* (J5) antigen on morbidity and mortality of dairy calves, 1492
Effect of vaccination with a monovalent *Leptospira interrogans* serovar *hardjo* type hardjo-bovis vaccine on type hardjo-bovis infection of cattle, 1639
Resistance to fecal shedding of salmonellae in pigs and chickens vaccinated with an aromatic-dependent mutant of *Salmonella typhimurium*, 1784
Effect of stage of gestation on efficacy of *Brucella abortus* strain-19 vaccination in cattle, 1848
VEIN LIGATION
Effect of left hepatic vein ligation on hepatic circulation, function, and microanatomy in dogs, 774
VENOUS PRESSURE
Effects of mechanical and pharmacologic manipulations on portal pressure, central venous pressure, and heart rate in dogs, 1327
VENTILATION
Cardiovascular effects of halothane anesthesia after diazepam and ketamine administration in beavers (*Castor canadensis*) during spontaneous or controlled ventilation, 665
Comparison of inhalation-to-perfusion ratio in anesthetized dogs with barrel-shaped thorax vs dogs with deep thorax, 1097
Effect of humidification on the airways of cats during high-frequency ventilation, 1474
VERTEBRAE, CERVICAL
Frequency and severity of osteochondrosis in horses with cervical stenotic myelopathy, 873
VITAMIN E
Comparative studies on bioavailability and tissue uptake of two intraruminally or intraperitoneally administered esters of α-tocopherol in sheep, 640
Serially determined plasma α-tocopherol concentrations and results of the oral vitamin E absorption test in clinically normal horses and in horses with degenerative myeloencephalopathy, 908
Evaluation of the oral vitamin E absorption test in horses, 912
VON WILLEBRAND DISEASE
von Willebrand factor in lysates of washed canine platelets, 119

WHEY
Inhibition of lymphocyte blastogenesis by whey, 247
WOLVES
Hematologic values of captive Mexican wolves, 1891
WOUND HEALING
Effects of a proprietary topical medication on wound healing and collagen deposition in horses, 1128
Effects of amnion and live yeast cell derivative on second-intention healing in horses, 1376

XYLAZINE
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585
Cardiovascular effects of xylazine and detomidine in horses, 651
Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses, 1153
Antagonistic effect of atipamezole on xylazine-induced sedation, bradycardia, and ruminal atony in calves, 1265
Hemodynamic response of calves to tiletamine-zolazepam-xylazine anesthesia, 1606

YEASTS
Effects of amnion and live yeast cell derivative on second-intention healing in horses, 1376

YOHIMBINE
Antagonism of ketamine-xylazine anesthesia in rats by administration of yohimbine, tolazoline, or 4-aminopyridine, 585

ZEARALENONE
Evaluation of use of progesterone to counteract zearalenone toxicosis during early pregnancy in gilts, 1871
ZINC
Effects of bacterial infection and castration on prostatic tissue zinc concentration in dogs, 1262
ZINEB, SEE THIOCARBAMATES
ZOLAZEPAM
Cardiopulmonary effects of a tiletamine-zolazepam combination in sheep, 1441
Hemodynamic response of calves to tiletamine-zolazepam-xylazine anesthesia, 1606